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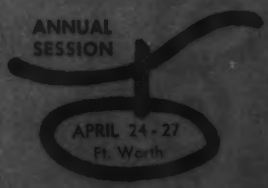

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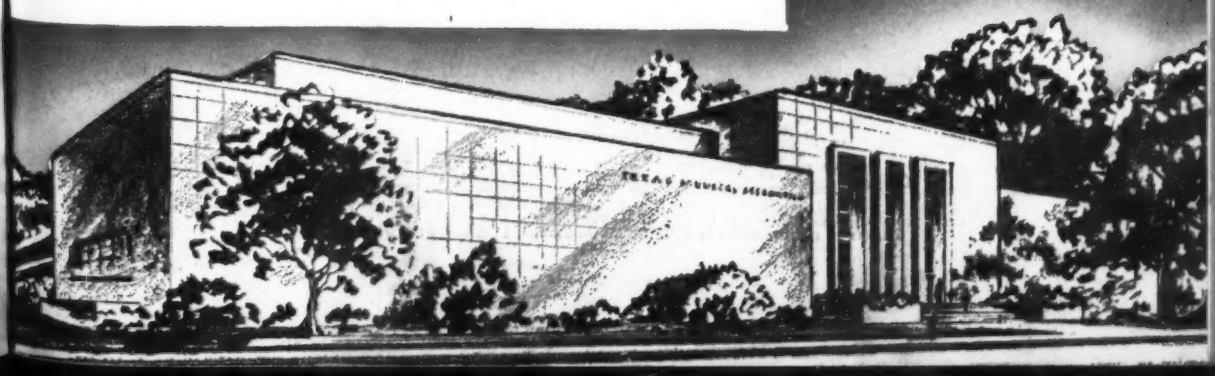

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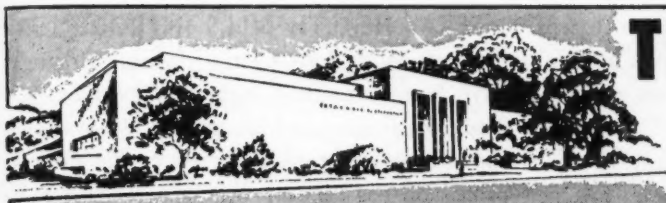

TEXAS State Journal of Medicine

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION AND PUBLIC HEALTH IN TEXAS

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REFRESHER COURSES READY

Details about the new feature which most people think will make the Texas Medical Association annual session in April the best ever are printed in the Organization Section of this JOURNAL. Listings of the twenty-five refresher courses to be given Monday, Tuesday, and Wednesday mornings of the session; names and partial qualifications of the faculty members; and instructions for registering are given. On a specially inserted page not far from the Organization Section is a postage-paid, tear-out postal card which may be used for registration for the courses—together with a second card with which to make hotel reservations.

Attendance at each course will be limited to approximately fifty, and tickets must be presented at the door. Anyone wishing, to assure himself the privilege of listening to the lectures and participating in the question and answer periods of the course series should act now to reserve a place by mail—it costs nothing except three minutes of time. There is no assurance that tickets will be available in Fort Worth at the time of the annual session.

The distinguished faculty is entering wholeheartedly into the plan to provide Texas physicians with reviews of problems which bob up repeatedly in everyday practice. Keeping the general practitioner particularly in mind, the lecturers will give up-to-date, usable information. Summary syllabuses will be available for each "student" to take home. Despite the attraction the courses will have for general practitioners (who will be granted hour-for-hour informal credit for the courses and other scientific programs at the state meeting by the Texas Academy of General Practice), specialists are likely to find subjects and expert teachers which appeal to them, and registration is open to them on the same basis as to general practitioners: first come, first served.

The refresher courses, needless to say, are but one aspect of the annual session program. Even all of the guest speakers, now numbering more than thirty, will not take part in the courses. They will participate in general, sec-

tion, and specialty meetings, all of which will be open to any member of the Texas Medical Association. The complete program will appear in the March JOURNAL.

Efforts have been made previously to enumerate the then known guest speakers for the Fort Worth meeting. In every instance, new names have been added to the list before it was in the hands of the readers. The newest name and one of the most important is Leonard Read, president of the Foundation for Economic Education, Irvington-on-Hudson, N. Y., who will talk at the general luncheon Wednesday. Mr. Read, a forceful speaker drawing on a broad background of experience and information, has delighted audiences across the nation and has left them with greater determination to make the most of themselves as responsible citizens.

Unlike the refresher courses, for which registration must be limited, hotel accommodations in Fort Worth are in good supply. True, not everyone will be able to stay in the same hotel, but ample comfortable and convenient bedrooms are to be had. Requests for reservations are being received daily, and anyone expecting to attend the session will do well to make it known now while there is a good selection of accommodations.

Oh, yes. It is said, "You'll have fun" in Fort Worth, too. Highlighting the entertainment during the session will be a buffet supper and dance at the Ridglea Country Club Tuesday evening with music and a floor show by Ted Weems and his orchestra. Admission to the affair which honors the President, F. J. L. Blasingame, Wharton, is $7.50. In addition to the President's Party, numerous fraternity parties and alumni banquets will be held as well as a golf tournament, and other entertainment is being scheduled daily for both the doctors and their wives. So, better remember the dates: April 24-27, and plan now to attend the eighty-eighth annual session.

TEXAS HEALTH BILLS INTRODUCED

A variety of bills relating to health matters have been introduced into the Texas Legislature since it convened last month. Information about those of greatest interest to the medical profession has been or will be sent directly to members of the Texas Medical Association, but anyone who has questions about them is invited to check with the Association's central office. The Council on Medical Jurisprudence with the assistance of Mr. Philip R. Overton, general counsel, is keeping up with the measures from day to day and can supply specific details.

Of particular importance to the welfare of the people of Texas is House Bill 6, a bill setting up naturopathy as a separate school of medicine and exempting its practitioners from taking the basic science examination as well as from control of the State Board of Medical Examiners. In effect, this bill would set up a double standard for the practice of the healing arts instead of the single educational standard which we now have. Association members have been informed of some action taken in connection with this bill, but as of February 7, H. B. 6 was recommitted to the State Affairs Committee where it will remain until action is taken by that committee.

Other bills before the Legislature as this JOURNAL went to press include:

H. B. 398 by Smith of Tarrant, exempting professional liability insurance from the operations of the single rating law.

S. B. 20 by Shireman, authorizing the State Board for Hospitals and Special Schools to make certain contracts for care and treatment of tuberculous patients.

S. B. 53 by Aikin, providing for payment for hospital care of tuberculous children in public and private hospitals (same as H. B. 60).

S. B. 143 by Strauss, amending the Uniform Narcotic Drug Act relating to narcotic drugs and barbiturates.

S. B. 169 by Kelley, reappropriating funds for construction of state hospitals for tuberculous patients to replace Weaver Baker Sanatorium (same as H. B. 317).

H. B. 2 by Berry and others, providing for the regulation of the practice of ophthalmic dispensing.

H. B. 65 by Moore of Harris and Pool, amending articles pertaining to narcotic drugs and barbiturates. It provides that prescriptions must be on serially numbered forms furnished in triplicate by the Department of Public Safety; every physician shall keep a record of such drugs received by him and a record of all drugs administered, dispensed, or professionally used by him otherwise than by prescription; such records shall be recorded on forms furnished in duplicate with duplicate copy delivered to the Department of Public Safety within ten days after the drug is administered or dispensed. Punishment is included for violation of any provision of the act.

H. B. 144 by Sheridan, amending certain articles relating to the practice of the healing arts, including penalty for those not having obtained a valid certificate from the Basic Science Board, and setting up legally required identifications for those practicing the healing arts, excluding the identification for a naturopath.

H. B. 308 by Talasek and others, amending the Uniform Narcotic Drug Act to provide for confiscation of any vehicle used for the illegal transportation of any narcotic drug and so forth.

H. B. 332 by Kelly, providing for authorization for the State Board for Hospitals and Special Schools to discharge any nonresident patient or student.

H. B. 331 by Kelly, authorizing the superintendent of state mental hospitals to furlough certain persons committed to their care and providing a method of contracting for such persons' care and maintenance, making necessary appropriations for such purpose.

H. B. 346 by Walling, changing the name and purpose of the Abilene State Hospital; eliminating epilepsy as a cause or bar to admission or commitment to state institutions.

H. B. 355 by McGregor and others, permitting the State Board for Hospitals and Special Schools to provide or perform necessary treatment and medical services to persons admitted or committed to its care without the consent of responsible relatives or guardians in certain cases.

H. B. 358 by Stroman, changing the name of McKnight State Sanato.ium to McKnight State Tuberculosis Hospital, and so forth.

H. B. 365 by Kennard, providing for initial admissions to state mental hospitals; providing that findings of hospital staff be admitted in evidence, and so forth.

H. B. 409 by Ferrell and Lieck, changing the name of Legion State Sanatorium to Legion Branch of the San Antonio State Tuberculosis Hospital, and so forth.

H. B. 411 by George Ford, requiring the insurance carrier to furnish reasonable medical aid, nursing, hospital services, and medicines for employees who are injured within the purview of the Workmen's Compensation Act for a period of one year following the infliction of such injury.

CONSTITUTIONAL AMENDMENTS FOR ACTION

The only amendment to the Constitution of the Texas Medical Association introduced before the House of Delegates in 1954 and ready for final action at the forthcoming annual session is related to a change in qualifications for membership in the Association. As required in Article XIII, Section 1, of the Constitution, the proposed amendment is published herewith for the information of members of the Association. The proposal should be considered and delegates made aware of the wishes of members of their county medical societies.

The proposed amendment was offered in a resolution reading as follows:

"*Whereas,* the first sentence in Article I, Section 2 of the Constitution and By-Laws of the Texas State Medical Association reads: 'The purpose of this Association shall be to federate and to bring into one compact organization the entire medical profession of the State of Texas . . .'; and

"*Whereas,* the inclusion of the word 'white' as a requisite for membership in the Texas Medical Association in Section 3, Article II, defeats the stated purpose of this Association and further creates an injustice to the Negro doctors of the state; now therefore be it

"RESOLVED: That Section 3, Article II, of the Constitution of the Texas Medical Association be amended to delete the word 'white' so that the first portion of the sentence of the section shall read as follows: 'Only physicians, holding the degree of Doctor of Medicine and legally registered to practice medicine in Texas. . . .'"

CURRENT EDITORIAL COMMENT

BLOOD BANK CLEARINGHOUSE

During February, 1955, the Texas Association of Blood Banks is initiating a clearinghouse for the exchange of blood and blood credits among participating blood banks. This system of reciprocity serves several important functions. For instance, it is possible to accept credit for a patient in one city by the donation of blood in another city; thus a patient in Houston or Temple may receive blood the credit for which is canceled by a donation in Amarillo or El Paso. Also, the shortage of blood in one bank can be replenished by the shipment of blood from another bank. Such arrangements increase the availability of donors, increase the supply of blood (especially less common types), and minimize losses through overage.

The office for the clearinghouse is located in Dallas.* This office will integrate all transactions between participating blood banks, mainly the exchange of credits between banks; authorize the shipments at the end of each month or two to cancel indebtedness between banks; collect and pay all processing fees between banks which are adjusted every one or two months; maintain a perpetual inventory of blood available at the participating banks within recent hours; and compile statistics for the system. Each blood bank remains autonomous although united by the principles of the plan.

The clearinghouse is a nonprofit organization and self-supporting through the establishment of transaction fees for services rendered. Donor replacements and blood shipments each entail two transactions, one from the sending and one from the receiving bank. Standard forms are used by the entire system and similar technical standards are used in the preparation of the blood. All accounts are kept with the clearinghouse and not between individual banks. The blood account indicates whether a given bank is indebted to the clearinghouse or vice versa, and a monetary account reveals how much individual banks owe for transaction and processing fees.

The system is being initiated by fourteen blood banks scattered over the state. The list includes:

City Blood Bank, Sherman.
Harris Memorial Hospital Blood Bank, Fort Worth.
Hendrick Memorial Blood Bank, Abilene.
Parkland Memorial Hospital Blood Bank, Dallas.
Potter County Memorial Blood Bank, Amarillo.
Scott and White Memorial Hospitals Blood Bank, Temple.
Southwest Blood Banks, Lubbock, El Paso, San Antonio, and Houston.
Stewart Blood Bank, Tyler.
Terrell's Laboratories Blood Bank, Fort Worth.
Travis County Medical Society Blood Bank, Austin.
University of Texas Medical Branch Blood Bank, Galveston.

It is expected that other blood banks will join the system subsequently. Each participant may enhance the effectiveness of the system by serving a zone about it.

Such a blood bank system offers outstanding by-products. It improves the integration of blood bank transactions by standardizing equipment and procedures and by an insistence on accurate methods. It is an automatic system of self-education. It develops habit patterns of cooperation and communication between blood banks. It can be a source for improved public relations and public education of this segment of the practice of medicine. It develops a system wherein most eligible donors throughout the state can be rapidly mobilized in emergencies of peace or war. By affiliations with other similar systems elsewhere in the country, as in California, Illinois, New York, and Florida, it multiplies its effectiveness and helps maintain blood banking within organized medicine.

E. E. MUIRHEAD, M. D., Chairman,
Committee on Blood Banks,
Texas Medical Association,
Dallas, Texas.

*725 *Doctors Building, 3707 Gaston Avenue.*

Parkland Memorial Hospital.

ORIGINAL ARTICLES

DISEASES OF THE ESOPHAGUS
Surgical Treatment

G. V. BRINDLEY, JR., M. D., Temple, Texas

MANY significant advances recently have been made in the surgical treatment of diseases of the esophagus. Improvements in anesthesia and development of chemotherapy have been major factors in this progress. Equally important have been experimental studies of esophageal anatomy and physiology. Now, the surgical treatment of diseases of the esophagus is as efficient and as safe as comparable major surgery elsewhere in the body. The purpose of this paper is to discuss some of the newer concepts in esophageal surgery.

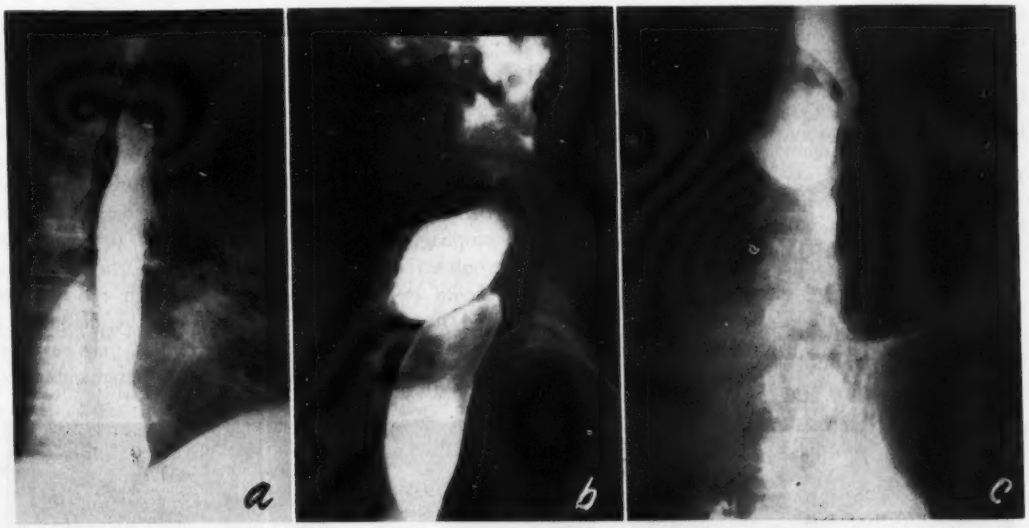

FIG. 1. Roentgenograms demonstrating diverticula of the esophagus: (*a*) traction type diverticulum of the middle one-third of the esophagus, (*b*) pharyngo-esophageal diverticulum, and (*c*) pulsion type epiphrenic diverticulum of the esophagus.

DIVERTICULA

Diverticula of the esophagus are common and may be classified into traction and pulsion types. The traction type diverticulum usually is found in the middle third of the esophagus near the hilar structures and seldom becomes large enough to produce obstructive symptoms. As pointed out by Adams,[1] however, there usually is an associated esophagitis at the level of the diverticulum produced by the tracheobronchial lymphadenitis. Occasionally, a subsequent stricture may require dilatations, and rarely sufficient stenosis may be present to require resection with primary anastomosis or esophagogastrostomy (fig. 1a).

The pulsion type diverticulum occurs frequently, usually in the cricopharyngeal region and in the lower third of the esophagus. If the sac is not small, it may produce considerable esophageal obstruction by angulation at the orifice of the diverticulum when the sac is filled with food. Regurgitation and its complications are seen frequently. Before the advent of chemotherapy, diverticulectomy usually was done as a two stage procedure. Now, for pulsion diverticula in each location, a one stage resection can be performed safely with good results (fig. 1b and c).

CONGENITAL ATRESIA AND TRACHEOESOPHAGEAL FISTULA

One of the most important congenital anomalies is atresia of the esophagus with tracheoesophageal

From the Department of Surgery of the Scott and White Clinic.
Read before Bexar County Medical Society, San Antonio, October 26, 1954.

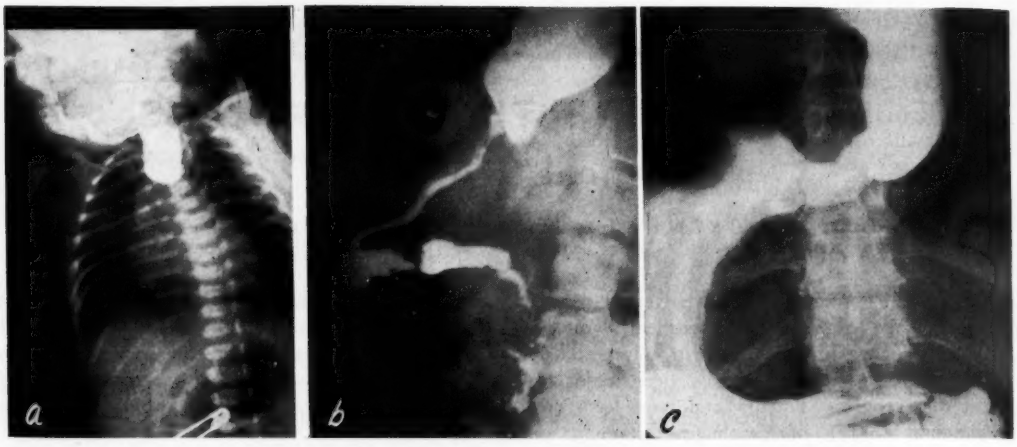

FIG. 2a. Lipiodol demonstrating congenital atresia of the esophagus. b. Achalasia with stricture changes in the cardia. c. Roentgenogram following esophagogastrostomy for achalasia with stricture changes in the esophagus.

fistula. This is the most common cause of dysphagia in the newborn infant and requires prompt correction to permit survival.

The different types of atresia have been well classified by Vogt:[11]

1. The esophagus is either absent or completely fibrosed. This form is seen rarely.
2. The upper and lower segments of the esophagus each end in a blind pouch. This is also unusual.
3. There is a communication between the trachea and one or both segments of the esophagus. This is the usual group and includes approximately 98 per cent of the reported cases. There are three subgroups in this type of atresia.
   a. The upper segment communicates with the trachea.
   b. The lower segment communicates with the trachea. This is by far the form most frequently seen and has been present in approximately 95 per cent of the reported cases.
   c. Both segments communicate with the air passages.

In a newborn infant, the symptoms of congenital atresia are very characteristic. Excessive salivation accompanied by episodes of cyanosis and dyspnea are seen almost immediately after birth. All feedings are regurgitated immediately. The diagnosis can be confirmed by passing a soft rubber catheter into the esophagus where the obstruction will be found. The contents of this upper segment of the esophagus should be aspirated carefully through the catheter; and if additional confirmation of the diagnosis is necessary, a small amount of lipiodol may be introduced into the catheter and roentgenograms obtained.

FIG. 3a. Benign stricture of the upper one-third of the esophagus. b. Gross specimen following resection of the esophagus for stricture in the proximal one-third. c. Benign stricture of the lower one-third of the esophagus. d. Roentgenogram following excision of the benign stricture and esophagogastrostomy in the same case as *c*.

The oil, then, should be aspirated. Barium never should be used.

Roentgenograms should be made of the thorax and abdomen to determine the presence or absence of gas in the stomach and intestines. The absence of gas strongly implies that either the lower segment of the esophagus is without a lumen or that there is no connection between the lower esophageal segment and the respiratory passage. If roentgenograms do not reveal gas in the gastrointestinal tract, the probability of obtaining a primary esophageal anastomosis is not good, and a left transpleural approach should be elected to facilitate an esophagogastrostomy if the two segments of the esophagus cannot be approximated. When roentgenograms reveal gas in the stomach and colon, a right extrapleural or transpleural approach is recommended since a primary esophageal anastomosis usually can be obtained in these patients after ligation and division of the fistula (fig. 2a).

FIG. 4. Traumatic rupture of the lower one-third of the esophagus.

ACHALASIA

This is one of the more commonly seen causes of esophageal obstruction. There may be associated dilatation of the esophagus and stricture changes in the cardia. Most cases of simple achalasia are better handled by dilatation. If this is unsuccessful, surgery may be necessary. In achalasia without stricture, a Heller type cardiomyoplasty usually will achieve a good result. This procedure consists of a longitudinal incision through the muscularis of the lower segment of the esophagus through the serosa and muscularis of the cardia and separation of the muscle fibers, permitting the mucosa to bulge into the incision. If there is considerable stenosis and dilatation of the esophagus, resection of the lower esophagus and cardia with esophagogastrostomy is the preferable procedure (fig. 2b and c).

ACQUIRED STRICTURES

Acquired strictures of the esophagus may be due to the swallowing of very irritating substances, such as acids or alkalies. Less frequently, infection with ulceration and subsequent stenosis may occur. Recently, there has been considerable speculation concerning an ulcer diathesis as the cause of many acquired benign strictures. The regurgitation of highly acid gastric contents into the lower esophagus with secondary esophagitis and later stricture may be part of the pathogenesis.

For simple incomplete strictures, dilatation usually is sufficient. If this is unsuccessful, resection of the stenotic segment is indicated. A narrow segment may be removed and a primary esophageal anastomosis performed. If the stricture is long, resection with esophagogastrostomy or a Roux Y type esophagojejunostomy generally is preferable.

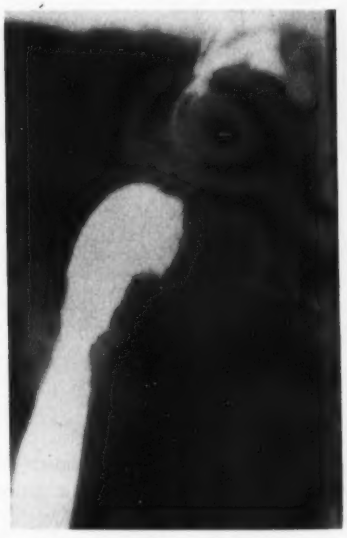

FIG. 5. Carcinoma of the cervical esophagus.

In patients with the ulcer diathesis and associated stricture of the cardia, a subtotal gastrectomy has been recommended (fig. 3).

BENIGN TUMORS

Benign tumors of the esophagus rarely occur and essentially consist of fibromas, leiomyomas, papillomas, and esophagenic cysts. Leiomyomas and fibromas are intramural and frequently can be dissected out without opening the mucosa. The other benign tumors often can be removed locally and the esopha-

gus reconstructed. Rarely is an esophageal resection necessary.

SPONTANEOUS RUPTURE

Spontaneous rupture of the esophagus is due to sudden increase in intraesophageal pressure usually associated with violent retching or vomiting. It may be recognized by sudden onset of pain in the mediastinum, shock, mediastinal emphysema, and often

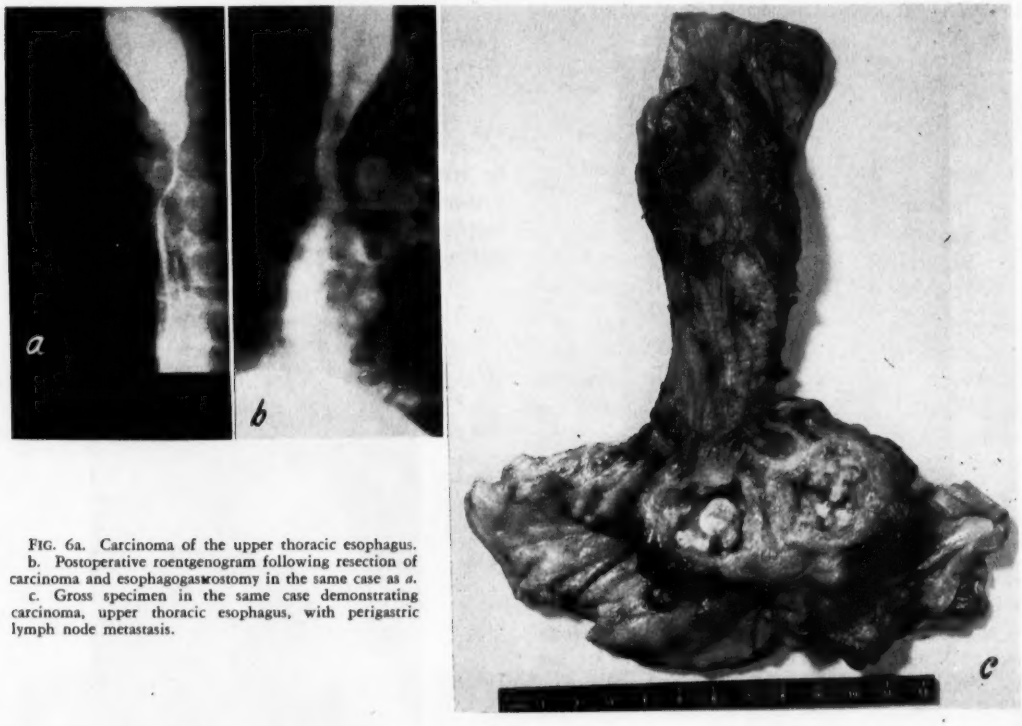

FIG. 6a. Carcinoma of the upper thoracic esophagus. b. Postoperative roentgenogram following resection of carcinoma and esophagogastrostomy in the same case as *a*. c. Gross specimen in the same case demonstrating carcinoma, upper thoracic esophagus, with perigastric lymph node metastasis.

unilateral or bilateral hydropneumothorax. The diagnosis may be confirmed by having the patient swallow lipiodol while being observed fluoroscopically. Once the presence of the perforation has been established, the patient should have immediate thoracotomy, debridement of the wound, careful repair of the defect in the esophagus, and intercostal catheter drainage of the pleural cavity.

Lacerations of the esophagus produce similar signs and symptoms. The laceration should be repaired and the pleural cavity drained. Antibiotics should be utilized liberally (fig. 4).

CARCINOMA

Torek[9] performed his classical esophagectomy with anterior thoracic esophagostomy in 1913; and Brun,[8] in 1916, reported the first operative survival following a transpleural gastric cardiectomy. The greatest improvements in the surgical treatment of carcinoma of the esophagus have occurred, however, in the last decade. Since it has been estimated that approximately 10 per cent of all patients with esophagogastrointestinal malignancy have cancer of the esophagus, the importance of these advances becomes apparent.

Cancer of Cervical Esophagus.—Essentially, there are four accepted methods of surgical treatment for cancer of the cervical esophagus. First, there is the Torek type of operation, which includes resection of the esophageal lesion and later reconnection of the two ends of the esophagus by a skin lined tube. Today, this operation seldom is used.

The second method, proposed by Trotter,[10] Eggers,[4] and Wookey,[12] includes resection of the larynx, the cervical esophagus, and the adjacent cervical lymph nodes en bloc. This procedure is particularly useful in cases in which there is involvement of the postcricoid region, the arytenoids, the thyroid gland, or the trachea. Esophageal continuity is reestablished by substitution of a skin tube for the resected segment of esophagus.

The third type of procedure consists of resection of the esophageal lesion and high esophagogastrosto-

my or pharyngogastrostomy. Some thoracic surgeons have preferred an esophagojejunostomy, and a few surgeons have used a segment of colon for the anastomosis.

When the lesion is quite small, a primary esophageal anastomosis occasionally may be feasible. This is seldom preferable, but in a poor risk patient with a small localized lesion it may be utilized.

Since the prognosis for carcinoma of the cervical esophagus is so poor, it may be preferable to reserve surgical therapy for lesions confined to the esophagus and to treat more advanced lesions by irradiation (fig. 5).

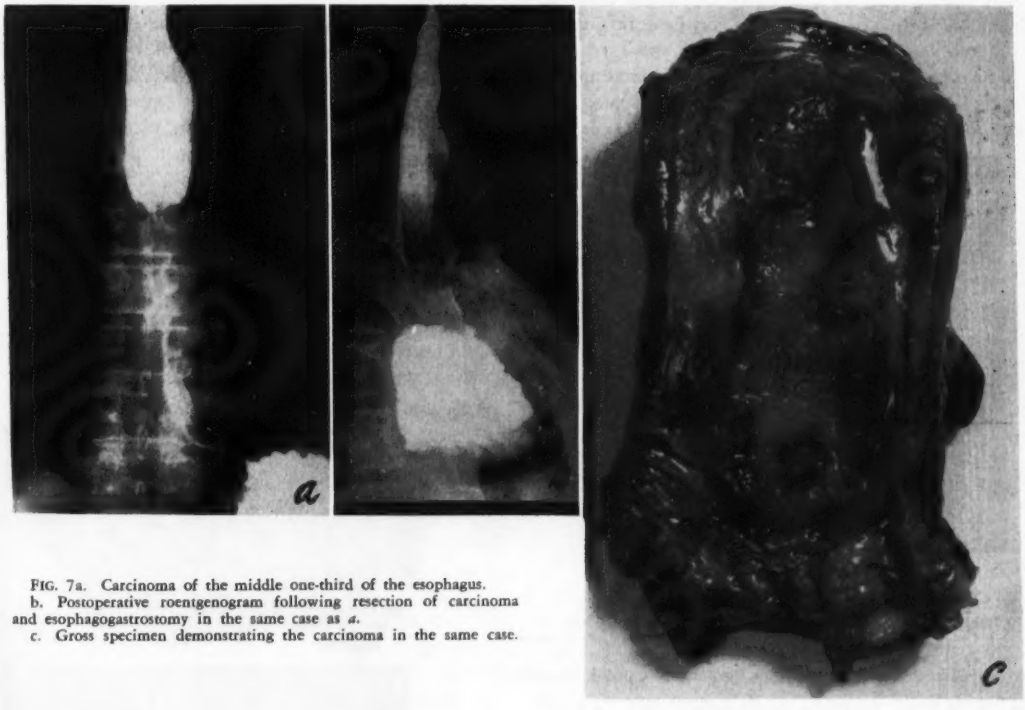

FIG. 7a. Carcinoma of the middle one-third of the esophagus.
b. Postoperative roentgenogram following resection of carcinoma and esophagogastrostomy in the same case as *a*.
c. Gross specimen demonstrating the carcinoma in the same case.

Cancer of Upper and Middle Thoracic Esophagus.—There has been some difference of opinion regarding the preferable method of approaching cancer of the upper and middle thoracic esophagus surgically. Sweet[8] demonstrated that the mobilized stomach could be delivered into the apex of the chest for a supra-aortic esophagogastrostomy after resection of the lesion. There may be some technical difficulty, however, in managing lesions near the aortic arch, and in 1946 Lewis[5] suggested a combined left upper abdominal and right transthoracic approach. Others have used a right thoracoabdominal incision. It has been my preference to use two surgical teams. While one operator explores the thorax through an anterior right thoracic incision, the other surgeon mobilizes the stomach and performs a pyloroplasty through a left paramedian abdominal incision. After the esophagus has been mobilized to well above the lesion, the stomach is passed into the right pleural cavity through the enlarged esophageal hiatus and an esophagogastrostomy performed following resection of the esophagus several inches above the lesion.

Some surgeons have used a Roux Y esophagojejunostomy in preference to an esophagogastrostomy. Ravitch[6] suggested this loop of jejunum be brought subcutaneously in the anterior thoracic wall, while Robertson[7] recommended utilization of the anterior mediastinum.

Berman[2] in 1952 demonstrated that a plastic tube could be used satisfactorily to replace a resected segment of esophagus. A firm fibrous tube formed, covered by esophageal epithelium. The use of the tube is most applicable following resection of a carcinoma of the midthoracic esophagus. One major objection to this technique is the inability to remove completely the lymph nodes around the lower esophagus and lesser curvature of the stomach.

When the lesion cannot be removed safely, occasionally, it may be desirable to perform an esophagogastrostomy or esophagojejunostomy above the lesion in order to preserve the function of swallow-

ing. In this type of patient, one may elect to dilate the involved segment of the esophagus by bougienage if obstruction is present and to administer irradiation therapy. In some patients, it may be desirable to introduce a Souttar tube through the stenotic segment to preserve the lumen of the esophagus and to permit swallowing. Regardless of the form of palliative surgical treatment selected, it should be supplemented by irradiation therapy (fig. 6 and 7).

Cancer of Lower Esophagus and Cardia.—It has been estimated that approximately 20 per cent of all carcinomas seen in the lower esophagus and cardia are of the squamous cell type and have originated in the esophagus with extension into the cardia. The remaining 80 per cent are adenocarcinomas and originate in the cardia with secondary involvement of the lower esophagus. The prognosis, however, is approximately the same with each type. Preferable treatment in all cases is a left transthoracic partial gastrectomy and lower esophagectomy with esophagogastrostomy.

Regional lymph nodes are involved in the majority of these patients and should be removed carefully (fig. 8).

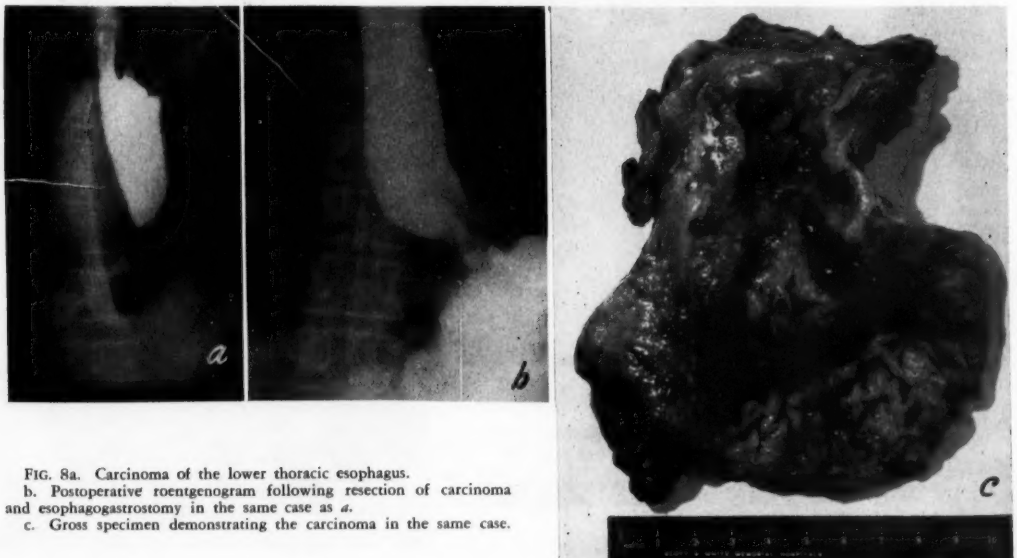

FIG. 8a. Carcinoma of the lower thoracic esophagus.
b. Postoperative roentgenogram following resection of carcinoma and esophagogastrostomy in the same case as *a*.
c. Gross specimen demonstrating the carcinoma in the same case.

SUMMARY AND CONCLUSIONS

A brief discussion of the recent developments in the surgical treatment of diseases of the esophagus has been given.

Diverticula of the esophagus may be classified as traction and pulsion types. The traction type seldom requires treatment. Occasionally, there may be an associated stricture requiring dilatation or resection. Pulsion type diverticula requiring treatment usually may be removed by a one stage diverticulectomy.

Most cases of congenital tracheoesophageal fistula can be corrected by ligation and division of the fistula with primary esophageal anastomosis. The management of cases in which primary anastomosis is not feasible has been reviewed.

Achalasia is usually best treated by dilatation. If this is unsuccessful, cardioplasty may be indicated. When associated stricture is present, resection of the lower esophagus and cardia with esophagogastrostomy may be preferable.

Simple acquired strictures of the esophagus generally can be successfully dilated. If this is unsuccessful, the stricture should be resected and either a primary esophageal anastomosis or esophagogastrostomy performed. In patients with an ulcer diathesis and associated stricture at the cardia, a subtotal gastrectomy has been recommended.

Benign tumors of the esophagus are rare, and local excision is usually sufficient. Spontaneous rupture or laceration of the esophagus should be repaired promptly and intrapleural water seal catheter drainage instituted.

Carcinoma of the cervical esophagus may be handled by several methods. These have been reviewed and the advantages of each discussed.

Carcinomas of the upper and middle thoracic esophagus probably are better approached by a combination of a right anterior thoracic and left paramedian abdominal incision. Suggestions as to pallia-

tive management of nonresectable carcinomas in this portion of the esophagus have been presented.

Carcinomas in the lower thoracic esophagus and cardia should be widely removed through a left posterolateral thoracotomy incision and esophagogastrostomy performed.

Improvements in the surgical treatment of diseases of the esophagus now permit as safe and effective management for lesions of the esophagus as is possible for comparable major surgery elsewhere in the body.

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Gastric Ulcer

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MANY respected authorities have advocated surgical resection for all gastric ulcers lest an early and operable cancer of the stomach be overlooked. I am not aware that this routine ever has been followed literally because few surgeons see all patients with gastric ulcer who are admitted to their hospitals. They therefore may have a biased viewpoint inasmuch as the patients referred to them are selected ones. This study is an attempt to evaluate the natural course and complications of gastric ulcer by means of an extended follow-up of all patients with chronic gastric ulcer admitted to the Veterans Hospital, McKinney, Texas, over a seven year span, regardless of whether they were on the Medical or the Surgical Service. We were anxious to learn (1) whether the results of gastric resection are sufficiently satisfactory to warrant recommending it routinely for all gastric ulcers and (2) whether there are reliable criteria by which selected cases may safely be carried on continued conservative treatment without overlooking a cancer.

This is therefore an intensive study of 100 cases of chronic gastric ulcer all of which have been followed from one to seven years since the patients were first seen. The series comprises 58 patients operated upon after varying periods of observation, 32 still on medical treatment either with the physician's approval or because of the patient's refusal to submit to operation, and 10 cases in which a gastric ulcer was not suspected clinically but was discovered at autopsy. This last group is not ordinarily included in studies of this sort but does contribute to an understanding of the natural course of this disease. Only those with a clear-cut histologic picture of chronic gastric ulcer have been included. Acute erosions commonly developing in the moribund state were eliminated. There are 10 malignant ulcers in this series. Cases with secondary ulceration of fungating cancers have not been counted since they do not present a diagnostic problem.

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Read before the Texas Surgical Society, Galveston, October 5, 1954.

DIFFERENTIATING MALIGNANCY

When a patient is first seen, I do not believe there is any certain means of distinguishing malignancy. The histories of those with cancer are often duplicated by those of patients whose lesions are benign. Some of the largest ulcer craters I have seen have proved to be benign. The location of the ulcer is not dependable since cancerous ulcers may occur on any portion of the stomach. Those on the greater curvature are commonly said to be invariably malignant. My experience with a small number of ulcers in this location has been that the chances are about even that they will be benign. Achlorhydria is presumed to favor a diagnosis of cancer. It so happens that all the malignant ulcers in this series secreted some free hydrochloric acid whereas in 5 of the proved benign ulcers there was none. Gastroscopy has not been too helpful and upon occasion has been misleading. I thus have had as much difficulty as anyone in making an immediate clinical distinction. Nevertheless

repeated examinations and observations of the behavior of the ulcer under treatment frequently clarifies the picture. This will be discussed in more detail in the section dealing with conservative treatment.

COMPLICATIONS

Even more perhaps than their counterparts in the duodenum, gastric ulcers are prone to develop major complications which in themselves require surgical intervention. On this score alone without regard for the suspicion of malignancy a high proportion require operation. Forty-five per cent of all the benign ulcers in this series presented at least one serious complication, most commonly significant hemorrhage or penetration of neighboring structures.

Significant hemorrhage occurred in 40 per cent of the patients. This complication is defined as an episode of gastrointestinal hemorrhage associated with faintness, weakness, and with a need for blood replacement. Questionable stories of "coffee-ground vomitus" or "dark stools" are not counted. In 8 per cent of this series hemorrhage was so severe as to be a threat to life and required emergency surgery. A single significant bleeding episode does not always constitute an indication for operation. I have observed a number of instances in which a single large hemorrhage was followed by many years of benign behavior of the ulcer. Recurrent hemorrhages, however, do require surgical intervention.

Penetration of surrounding tissues such as the pancreas, transverse mesocolon, and liver can be positively demonstrated only at operation or autopsy. Its occurrence was confirmed in 31 per cent of the cases under consideration. It is to be suspected clinically whenever the patient has continuous unrelenting pain not controlled by simple dietary measures or when the pain is referred elsewhere than the epigastrium. It has been my experience that there can be no expectation of permanent healing once the wall of the stomach has been penetrated, and patients with such lesions are candidates for operation.

The incidence of acute perforation in this series is much lower than would be found in an urban hospital where emergency cases present themselves more frequently. This study includes only 2 such cases. Both patients had simple closures of their perforations and both died of arterial embolism, being the only surgical deaths in the entire series.

SURGICAL TREATMENT

Operation was done on 66 per cent of the recognized ulcers and was recommended but refused in an additional 9 per cent. This operability rate is in contrast with one of 14 per cent for the duodenal ulcers seen during the same years. A suspicion of malignancy was the *sole* indication for surgery in 15 cases, and within this group 8 of the 10 gastric cancers were found. It is evident, therefore, that when malignancy is kept in mind, something about the history, the roentgen-ray findings, or the behavior of the ulcer will dictate early exploration, and thus very few gastric cancers should remain obscure long.

Resection was done with the exception of the 2 simple closures of perforations. There were 3 local wedge resections done as excisional biopsies upon a healing ulcer. The remaining 43 operations were subtotal gastrectomies. There were no deaths in the hospital. Two patients died within the first year after operation of causes having no relation to their ulcers, leaving 44 cases to be followed.

I have made observations from one to seven years after operation on all the living surgical patients. Seventeen have been followed from two to four years and 19 for more than four years. Twenty-four patients are entirely well. They eat three unrestricted meals a day without any symptoms or need for medication. Fourteen additional patients have no complaints except that, due to the limited capacity of the residual stomach, they cannot eat an average-sized meal without discomfort. Many people would regard this as a natural corollary of subtotal gastric resection. I submit, however, that a man who has to eat five or six small meals a day because his stomach capacity is limited is handicapped to precisely the same degree as the one with an ulcer who requires frequent feedings for relief of his discomfort.

Frequent feedings do not constitute a serious handicap, however, and thus what I have designated as class 1 and 1A may be regarded as satisfactory results from operation. These two groups comprise more than four-fifths of the resections. During the last two or three years I have made increasing use of Bilroth I type of anastomosis as a means of conserving a larger segment of stomach. This has the theoretic advantage also of reuniting the gastric remnant with the duodenum rather than bypassing the latter. This modification has improved results from the standpoint of gastric capacity, but in all other respects it has been disappointing. Furthermore, there is some doubt that it is an appropriate operation for duodenal ulcer, which was found associated with the gastric ulcer in 15 of the 100 cases in this series.

The results of gastrectomy are less satisfactory in 6 of my patients because of the so-called dumping syndrome or an inability to regain their preoperative weight level. Five of these patients are able to carry on their usual activities with only an occasional interruption and are graded as class 2. One is incapacitated and is reported to have a new ulcer of the stomach above his anastomosis. He must be graded

as class 3. There are no known marginal or jejunal ulcers in this series.

No thoroughly satisfactory explanation for the "dumping phenomenon" ever has been proposed. I have noted minor degrees of this syndrome rather commonly during the early months after operation. In 5 instances it is persistent and disturbing.

Insufficient attention has been given to the inability of some gastrectomized patients to regain weight. Approximately 2 patients in 5 in this series have not recovered the optimum weight they had prior to their illness. In most instances this is not disadvantageous and does not constitute an incapacitating handicap. In 4 of the cases, however, the weight loss has been from 14 to 24 per cent of that obtaining prior to illness and constitutes a genuinely disabling factor. Zollinger[1] has emphasized this problem and has suggested that those who are below the standard weight for their age, height, and build before operation are most likely to present this difficulty. The series under study, however, follows no such pattern, and it has not been possible to predict which patients will fail to gain.

MEDICAL TREATMENT

For one reason or another 52 patients were tried on conservative treatment for a period exceeding eight weeks from the time they were originally seen. Ten of these were operated upon later and constitute the absolute failures of conservative treatment. Among these were 2 cases of cancer which will be commented upon later. The 10 patients admitted to this hospital for other predominant diseases, such as pulmonary tuberculosis or heart disease, and in which a typical chronic gastric ulcer was discovered only at autopsy also are included. Three of these had severe hemorrhage terminally. The majority did reasonably well. None were found to have gastric cancer. The inclusion of this autopsy group, therefore, does not materially affect the overall results for nonoperative treatment. The urgency of their dominant disease prevented disclosure of their ulcers by gastrointestinal radiography. On the other hand several asymptomatic gastric ulcers were found by the mere chance of a routine gastrointestinal roentgen-ray study and thus are included in the series. It appears proper in evaluating the management of gastric ulcer to include both these groups—those missed because roentgen-ray examination was omitted and those found because this happened to be employed routinely.

Thirty-two patients remain under conservative therapy at present, 24 by deliberate selection and 8 because they have refused recommended surgery.

I have evaluated the results in these conservatively treated cases by a classification comparable with that used for the cases of surgical resection. Class 1 are asymptomatic and have radiographic evidence that their ulcers are healed. Class 1A have occasional mild symptoms which they are able to control simply by taking interval meals or an antacid drug. They are not otherwise restricted in their diets. Class 2 are those who can remain comfortable and employable but only by strict adherence to a dietary and antacid regimen. Class 3 comprises patients who, despite dietary restrictions and medication, experience episodes when their symptoms are uncontrolled and in consequence temporarily incapacitate them from work. Surgery has been urged upon these patients, but they have not consented to it. Finally, in class 4 are the patients who ultimately required an operation of necessity because of life-threatening hemorrhage or complete pyloric obstruction and those who were belatedly found to have cancer.

The evaluation of the entire group of 52 cases and also that of the 24 deliberately selected as favorable for conservative treatment is suggested in figure 1.

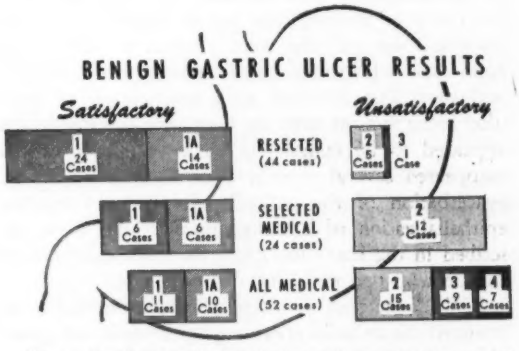

FIG. 1. Results of medical and of surgical treatment in cases of benign gastric ulcer ranging from class 1 (most satisfactory) to class 4 (least satisfactory).

If both class 1 and 1A are considered satisfactory, there are good results in less than half of those with conservative management in general and in half of a carefully selected group with medical management, as contrasted with four-fifths following gastric resection.

CRITERIA FOR MEDICAL THERAPY

Reviewing the experiences with cases in which medical treatment has failed as well as those in which it was successful, I believe there are some reliable criteria upon which to make a prediction. In the uncomplicated case with nothing in the history or radiologic findings to arouse immediate suspicion of malignancy, the behavior of the ulcer during an initial six weeks trial period of conservative management provides a valuable indication not only of the nature of the ulcer but of its probable future course.

The truly benign ulcer which may safely be continued on a conservative regimen should show some definite radiologic evidence of healing within the first two or three weeks. Meanwhile the patient's symptoms should disappear. At six weeks both the roentgenograms and the fluoroscopic observations should convince the radiologist that no more than a cicatricial deformity remains at the site of the crater and that the normal flexibility of the stomach wall has returned. If at any time subsequently this patient has recurrence of ulcer symptoms, he should be reexamined by barium meal. The 24 patients deliberately selected for medical treatment in this series met these rigid criteria without exception during the first six weeks.

In contrast, the cases eventuating in "medical failure" showed deviations from this favorable course. The symptoms of these patients did not subside promptly, and their ulcer craters did not manifest a prompt tendency to heal. Quite commonly the report of the radiologist prior to their discharge described the crater as "healing" but not as "healed." Too frequently these patients were allowed to drift away from close observation before healing was complete, and they then returned with reactivation of their ulcer some months later. In 1 instance an ulcer which appeared to be completely healed at seven weeks reappeared several months later associated with an exacerbation of the patient's symptoms. Complete epithelialization of a malignant ulcer has been described in the literature, but I have not encountered anyone who personally has observed this.

Rigid adherence to these principles would have obviated the delay in operating upon the 2 malignant ulcers to which I have referred. One of these patients had unremitting pain although both radiologic and gastroscopic findings were optimistically misinterpreted as showing slowly progressive healing. The other left the hospital with an unhealed ulcer crater, and this was still evident upon his return four months later although in the meantime he had become asymptomatic. Incidentally, this patient is now well three years following gastric resection.

There is a possibility that some of the conservatively treated cases will require operation because of recurrence sometime in the future, but it is unlikely that there are any unrevealed cancers among the 32 patients remaining on conservative treatment. The time elapsed during which they have been under observation would seem to preclude this in all except 2 with mild symptoms and small ulcers who are still in their second year of observation. Nine cases have been followed from two to four years, 13 from four to six years, and 8 for more than six years.

SUMMARY

The result of surgical resection for gastric ulcer although not perfect are demonstrably superior to those of nonoperative treatment. Surgery is imperative whenever there is a reasonable suspicion of malignancy and in the considerable group with significant complications. In this study operation appeared to be indicated in 75 per cent of cases. The operative mortality was nil except in the presence of acute perforation. A small group of cases possibly may be selected for prolonged medical treatment without serious risk of overlooking a cancer if certain rigid criteria are followed. These patients must manifest prompt clinical and radiologic improvement and roentgen-ray evidence of complete healing within six weeks. If for any reason these patients cannot remain under close supervision with repeated barium meal studies or if symptoms recur after initial healing, surgery should be recommended.

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Nurse Recruitment Aids

The Committee on Careers, National League for Nursing, has published three new nurse recruitment aids. They are a list of "Schools of Professional Nursing—1954," a chart on "Opportunities in Professional Nursing," and an illustrated brochure, "Careers in Nursing—Handbook for Counselors." The publications are designed for use by college and high school counselors; recruitment committees; nursing, hospital, and medical associations; schools of nursing; and hospitals in advising prospective students about the preparation for and the career opportunities in nursing.

Single copies of "Schools of Professional Nursing—1954" and the "Opportunities in Professional Nursing" chart are available without charge and the "Careers in Nursing—Handbook for Counselors" for 25 cents from the Committee on Careers, National League for Nursing, 2 Park Avenue, New York 16.

AMERICAN COLLEGE OF PREVENTIVE MEDICINE

Steps were taken to organize an American College of Preventive Medicine at a recent meeting of diplomates of the American Board of Preventive Medicine in St. Petersburg, Fla. Dr. George Dame, Jacksonville, Florida State Department of Health, was named president. Purposes of the college are "to encourage and aid medical colleges in establishing a system of teaching and dignifying preventive medicine; to enhance and maintain the interest of physicians in preventive medicine; to maintain and advance the highest possible standards in preventive medical education, practice, and research; to encourage the several schools of public health; to maintain high standards in the specialty of preventive medicine; and to promote the public welfare in connection with the specialty of public health."

NEW ASPECTS OF OLD LIVER FUNCTION TESTS

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LIVER function tests are numerous, and it is manifestly impossible for a single laboratory to attempt to perform all available tests and modifications which number into the hundreds. Yet a choice must be made by each laboratory with the thought in mind to offer a wide battery of generally accepted procedures conducted according to the most accurate, yet efficient modification. Under these conditions each procedure may be standardized frequently and rechecked for technical precision.

No battery of liver function tests has been devised which will offer a positive diagnosis of all forms of liver disease. Rather, the tests will offer general information as to liver status and, in some instances, point out the general category of disease or indicate nonliver origin of the clinical findings.

The technique of some tests has varied widely; hence the normal values differ from laboratory to laboratory (table 1).

From the surgeon's viewpoint, hepatic function tests alone may not indicate when to operate but may indicate when not to operate. The differentiation between "medical jaundice" and "surgical jaundice" still rests on a careful history and a complete physical examination, augmented by precisely chosen liver tests carefully performed.

Since the liver has a large reserve (75 to 90 per cent), function tests are abnormal when diffuse disease affects all the cells or focal lesions are widespread. Damage may be physiologic or anatomic, and regenerative powers are strong. However, the more sensitive tests are positive as soon as clinical signs and symptoms implicate the liver. Needle biopsies probably should be used more often.

Function tests may indicate the differential diagnosis. The urine bilirubin test is positive in hepatic jaundice but not in hemolytic (nonhepatic) jaundice. In hepatitis the bilirubin level may be elevated earlier in the urine than in the serum. One must recall constantly to mind that late obstructive disease damages the liver parenchymal cells just as does hepatitis and acute necrosis (poisons and toxins).

Serial tests are of great value in determining prognosis, response to treatment, and complete recovery.

TESTS FOR SCREENING

The use of screening tests for hepatic dysfunction is gaining wide recognition, especially for the detection of early liver damage. Different liver functions are screened by different tests:

1. Pigment metabolism—serum bilirubin.
2. Excretory function—Bromsulphalein retention.
3. Protein and lipid metabolism—thymol turbidity and cephalin flocculation.

TABLE 1.—*Normal Values for Liver Function Tests.*

1. Bilirubin, total: up through 1.0 mg./100 ml. of serum		
2. Bromsulphalein (B.S.P.) retention (5 mg./Kg. dose, 30 min.):	Normal — 0 to 5%	
	Abnormal — 6 to 100%	
3. Thymol turbidity:	Normal — 0 to 5 units	
	Abnormal — 5 units and above	
4. Cephalin-cholesterol flocculation (24 hr. reading):	Normal — 0 to 1+	
	Abnormal — 2+ to 4+	
5. Urine urobilinogen (Watson 1 p. m. to 3 p. m. specimen):	Subnormal — 0.0 to 0.2 Ehrlich units/ 1 to 3 p. m. specimen	
	Normal — 0.2 to 0.8 Ehrlich units/ 1 to 3 p. m. specimen	
	Abnormal — 0.9 and above Ehrlich units/ 1 to 3 p. m. specimen	
6. Fecal urobilinogen:	Subnormal — 0 to 30 Ehrlich units/ 100 Gm. of feces	
	Normal — 30 to 200 Ehrlich units/ 100 Gm. of feces	
	Abnormal — 200 and above Ehrlich units/ 100 Gm. of feces	
7. Alkaline phosphatase:	Adults — up to 15 King-Armstrong units/ 100 ml. of serum	
	Children — up to 26 King-Armstrong units/ 100 ml. of serum	
8. Prothrombic activity:	Subnormal — 0 to 70%*	
	Normal — 70 to 100%	
9. Serum proteins:		
a. Serum total protein:	Adults — 6.0 to 7.8 Gm./100 ml.	
	Newborn — 4.5 to 5.5 Gm./100 ml.	
b. Serum true albumin:	3.2 to 4.1 Gm./100 ml.	
c. Serum true globulin:	Adults — 2.6 to 3.8 Gm./100 ml.	
	Newborn — 1.0 Gm./100 ml.	
d. Alpha globulin:	0.7 to 1.5 Gm./100 ml.	
e. Beta globulin:	0.7 to 1.3 Gm./100 ml.	
f. Gamma globulin:	0.7 to 1.3 Gm./100 ml.	

**Considered subnormal only after vitamin K₁ administration (prothrombin production test).*

USUAL DETERMINATIONS

1. *Bilirubin,* or serum "bile," determinations (a) establish the absence or presence of jaundice and (b) indicate the fluctuations. A "base line" is thereby determined from which decreasing or increasing degrees of jaundice are measured. This replaces the icterus index, which is a measure of "yellow" only and hence is fraught with many errors which introduce any yellow color into the serum. Extraneous yellow colors usually enter the serum by dietary intake (carrots, yams, turnips), by therapy (riboflavin), or following weight loss (mobilization of lipochromes and carotenes of the lost adipose tissue). Hemolysis gives falsely high values unless acetone precipitation is used. The fractionation of bilirubin (van den

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Bergh) generally offers little help in the differential diagnosis of jaundice, and it has been misleading clinically; it has been replaced with the total bilirubin determination and urobilinogen studies on urine and feces.

Some report normal levels for bilirubin up to 1.2 mg. per 100 cc. of serum for adults, but it is probably wise to attempt an explanation of all values over 1.0 mg. Usually the bilirubin level must rise above 2.5 mg. per 100 cc. before jaundice appears and decrease below 1.8 mg. per 100 cc. before jaundice disappears. In newborn infants the normal is quite high as is shown in table 2.

TABLE 2.—*Normal Values for Serum Bilirubin in Newborn Infants.*

Age (days)	Range (mg./100 ml.)	Average (mg./100 ml.)
Birth	0.4 — 4.0	1.6
1	1.4 — 6.0	3.2
2	1.5 — 9.0	5.0
3	1.3 — 11.0	4.8
4	1.2 — 13.0	4.5
5	1.0 — 12.5	3.9
6	1.0 — 12.0	3.8
7	1.0 — 11.0	3.4
8	0.6 — 10.0	2.7
9	0.5 — 10.0	2.8
10	0.4 — 8.0	2.5

The determination may be performed on blood serum requiring 4.0 ml. of clotted blood; a semimicro method for infants requires only heel blood (0.2 ml. of serum). Determination of bilirubin in serum is more sensitive than in urine as a rule as it eliminates the variable factor of kidney function.

2. *Bromsulphalein* dye offers a rather sensitive test but only if the larger dose (5.0 mg. per kilogram of body weight) is given and the shorter time interval is employed (thirty minutes) because of the large amount of normal liver tissue reserve. Incorrect estimates of patients' weight has led to doses too large (false positive results) or too small (false negative results). Care must be taken to insure that all the calculated dose actually enters the vein and not the surrounding tissues as this leads to false negative results. The dye is carried to the liver by the blood stream where the reticulo-endothelial cells excrete the dye into the hepatic canaliculi. In heart failure circulation is slowed and dye does not reach the liver as usual; this produces false positives. (True positives also occur with the liver congestion of heart failure.) Jaundice is prima facie evidence of bile obstruction, extrahepatic or intrahepatic, and here there is little reason to perform a Bromsulphalein test. There are correction tables for Bromsulphalein in the presence of minimal degrees of jaundice. Dose calculation is as follows: body weight in pounds divided by 22 gives the dose in milliliters (5 mg. per kilogram of body weight or 0.1 ml. per kilogram).

3. *The thymol turbidity* test is positive when lipoproteins, presumably released from the destroyed liver cells, are present in the blood. Nonhepatic sources of these proteins will give a positive test. This test requires fasting blood as ingested lipids may give false positive. It is similar to the cephalin-cholesterol flocculation test in significance and has the advantages of requiring only thirty minutes to perform and of remaining positive in later stages of liver disease. However, the cephalin-cholesterol flocculation determination probably becomes positive earlier in most forms of liver cell disease and possibly returns to normal earlier. As the thymol turbidity reflects liver cell damage it is useful in infectious hepatitis, early cirrhosis, acute necrosis, and later phases of extrahepatic obstruction. It is used to follow recovery of the liver especially in determining when to allow ambulation of the patient recovering from hepatitis.

4. *Cephalin-cholesterol flocculation* determinations require twenty-four hours; there is no such thing as a "Stat." cephalin-cholesterol flocculation. (The blood collection may be "Stat." but not the report of the results.) The cephalin-cholesterol technique is superior, technically, when it is read on the photometer, which eliminates the personal visual error of judging flocculation. The modification known as the cephalin-cholesterol turbidity test is more rapid. The significance is similar to thymol turbidity and can be used on occasion to alternate with thymol turbidity determinations. The cephalin test turns abnormal earlier in hepatic cell damage disease (other than infectious hepatitis and homologous serum hepatitis) than the thymol turbidity, as a rule.

It is well to keep in mind that any nonhepatic disease that alters the quantitative relationship between the albumin and gamma globulin may give abnormal thymol turbidity and cephalin flocculation results; hence these tests are not specific for liver disease. A negative test may even be associated with severe liver disease if serum protein abnormalities do not occur. It has been suggested that a strongly positive flocculation with elevated alkaline phosphatase indicates parenchymal damage whereas normal flocculation with high alkaline phosphatase means extrahepatic obstruction.

The test is usually negative with early biliary obstruction and positive with late biliary obstruction, hepatitis, and acute liver necrosis ("acute yellow atrophy").

No forty-eight hour reading is required. The twenty-four hour reading diminishes false positives (most technical errors tend toward false positives) and offers a more rapid report.

5. *Urine urobilinogen* determination is an aid to

the differential diagnosis of icterus. The two hour afternoon specimen is very satisfactory. Repeated negative urine urobilinogen results (on three separate days) indicate biliary obstruction unless the patient is receiving antibiotics, which may have reduced the intestinal flora that converts bilirubin to urobilinogen. High values are found in anemias of the hemolytic type which overload the liver with bilirubin for excretion. In mild infectious hepatitis and acute liver necrosis, the urine urobilinogen level is high (poor excretion of urobilinogen), and in severe stages of these diseases, urobilinogen is absent (no excretion of bilirubin). Repeated tests are to be ordered as reappearance of urobilinogen is a good prognostic sign. This test obviously cannot be used if there are abnormal renal excretions or an abnormal renal threshold.

6. *Fecal urobilinogen* testing has limited use. Serial determinations are of greater use than single values. Urobilinogen may be determined on any stool specimen (which is usually the twenty-four hour collection), but the ninety-six hour collection is better. Values up to 3,500 Ehrlich units per 100 Gm. may be found in diseases of a hemolytic nature as urobilinogen is formed in the intestinal tract from bile by the flora. Some is reabsorbed and excreted in the urine and again as bile through the common bile duct. In obstructive jaundice, the fecal urobilinogen level decreases or is absent as subnormal values are reaching the intestine. If obstruction is complete (as is usually produced by carcinoma along the common bile duct route), fecal urobilinogen is absent. In partial obstruction (for example, stone) decreased values are intermittent. In hepatogenous jaundice (hepatitis, acute necrosis, and so forth) values are normal or decreased depending on the degree of cellular injury and capability of the cell to secrete bile.

7. *Alkaline phosphatase,* although usually thought to be formed in bone by osteoblasts, may have a hepatic origin as well, recent evidence suggests. It is excreted with the bile; hence, obstruction gives increased values. The hepatic cell rather than the reticulo-endothelial cell excretes this enzyme; hence, hepatic cell damage is accompanied by increases in the serum. Bone activity must be ruled out when high values are found.

Normal values are encountered in hemolytic jaundice. Values above 25 units usually are due to common bile duct obstruction (75 to 90 per cent of cases). Lower, but abnormal, values are found in hepatogenous jaundice (85 per cent of cases); thus, there is an overlap in the slightly elevated ranges. By using alkaline phosphatase as a test of regurgitation jaundice and cephalin flocculation as an index of hepatogenous damage, some workers have claimed the differentiation to be sharpened. They claim that high alkaline phosphatase levels plus strongly positive cephalin-cholesterol flocculation results indicate primary parenchymal damage, whereas high alkaline phosphatase plus low or normal cephalin-cholesterol flocculation indicates extrahepatic obstruction. Because of the wide variations of normal alkaline phosphatase values, these differential points are not applicable to children. Other observers have challenged the reliability of this entire differentiation.

8. *Prothrombic activity* values which are low initially do not necessarily implicate the liver as formation in and absorption by the intestinal tract may be at fault (as from previous therapy with antimicrobial agents). Biliary obstruction decreases the absorption of fat-soluble vitamin K. Vitamin K (the K_1 form gives most uniform response) should be administered if the prothrombic activity is less than 70 per cent; it may be given intravenously as two 10 mg. doses, several hours apart, and the blood for the second prothrombic activity test drawn twenty-four hours after the first dose. The rise should be at least 20 per cent unless liver cell damage is present. In early obstructive jaundice without liver cell damage, the initial value is normal or shows a significant rise with the vitamin K administration (positive prothrombin production test). With hepatic cell damage the rise is minimal (negative prothrombin production test). Normal initial values indicate normal liver cells and the production test is unnecessary.

9. *Serum protein* determinations have considerable value.

Albumin may be low because of chronic liver disease, especially cirrhosis. Hypoalbuminemia is not specific, of course, for liver disease as many other states, especially renal disease, produce this condition. When the concentration of serum albumin decreases in (a) cirrhosis, (b) malnutrition, (c) acute febrile disease, or (d) subacute glomerulonephritis, alpha globulins rise. This inverse relationship does not hold true for multiple myeloma in which the alpha globulin level may be at normal despite a low albumin concentration. If the total protein value is low, it usually is due to low albumin; if the total protein value is high, it is usually due to high globulin.

Gamma globulins may be of aid in establishing a diagnosis between biliary obstruction and hepatitis; albumin and alpha and gamma globulin values are normal in obstruction whereas albumin tends to be low and alpha and gamma globulins high in the presence of a damaged liver parenchyma. Fractionation studies also serve as a guide to prognosis in liver disease, both high gamma globulin levels and low or falling albumin values indicate poor prognosis. Recovery from these conditions cannot be considered

complete as long as the protein fractions remain at abnormal levels. The use of the term "A/G ratio" is misleading and should be abandoned. The actual expression of the ratio does not tell whether the albumin value is low or the globulin value is high. Thus a ratio of 0.1 may mean an albumin of 0.3 Gm. with a globulin of 3.0 Gm. or an albumin of 1.0 Gm. with a globulin of 10.0 Gm. Obviously the significance of these two clinical situations is not at all similar although the A/G ratio of 0.1 is identical. The actual quantity of each protein fraction in grams per 100 ml. is the information desired.

The old albumin methods included alpha globulin with the albumin, and normals have been too high. Electrophoresis studies have prompted the development of a chemical method for true albumin and true globulin which keeps alpha globulin within the globulin groups. This true separation demands that normals for globulin be increased and those for albumin decreased. These new values are given in table 1.

SUMMARY

It is urged that the following be given consideration:

1. The icterus index should be replaced by the total bilirubin determination.
2. The van den Bergh test should be discontinued; it is misleading in differentiating extrahepatic and intrahepatic icterus. Hemolytic icterus is demonstrated better by urobilinogen estimations.
3. The Bromsulphalein test should be employed with a large dose and a short time interval.
4. The cephalin-cholesterol flocculation determination can never be "Stat."
5. Prothrombic activity should be reported in percentage, not in seconds. Vitamin K_1 should replace vitamin K preparations.
6. The term "A/G ratio" is worthless.
7. The "normals" for albumin have been too high in the past. Globulin normals have been too low.
8. Urobilinogen studies on urines and feces need greater selected use as does needle biopsy.

PSYCHOLOGY OF THE DEAF

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MUCH has been written of recent years regarding psychology of the deaf. The public has become more deaf-conscious because of the impetus of new or improved surgical techniques and electro-acoustical appliances, post World War II rehabilitation of service-connected deafness, programs for the deaf in public schools, and increasing awareness generally both in lay literature and on television on medical and psychologic subjects. The psychologic aspects have been studied particularly in speech and hearing centers, in veterans' and armed forces' establishments, and in many universities. Considerable literature has been published. It would seem helpful at this time to have a clear compendium on the subject. To that end, this discussion is dedicated.

To set forth a common understanding for discussion a definition of terms is in order. Some variation in opinion as to just what constitutes the deaf, the hard of hearing, and the congenitally deaf is evident. Landis and Bolles[6] in their abnormal psychology text stated: "The deaf are those who are born either totally deaf or sufficiently deaf to prevent the establishment of speech and natural language or those who become deaf in childhood either before or soon after the establishment of speech so that the ability to speak and understand speech and language has been practically lost. . . . The hard of hearing are those who have established speech and the ability to understand speech and language, and subsequently developed impairment of hearing."

Dorland's[3] medical dictionary defines deaf as "Lacking the sense of hearing or not having the full power of hearing."

Probably the most widely used and the one which I choose to accept is the following definition adopted by the Convention of American Instructors: "The deaf: those in whom the sense of hearing is nonfunctional for the ordinary purposes of life. . . . The congenitally deaf: those in whom the sense of hearing, although defective, is functional with or without a hearing aid." Some consideration will be given to the psychology of the congenitally deaf child, with more extensive discussion regarding psychology of the deaf in general and of the hard of hearing. Mention will be made of the aged deaf who present a somewhat different psychologic picture.

Ramsdell[15] ingeniously has clarified psychologic aspects of deafness by his concept of the three psychologic levels or functions of hearing. Brief mention of these here will serve as a basis for departure into discussion as indicated previously.

The first level of hearing is the "auditory back-

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ground" or "primitive level" whereby the constant background of sound in life maintains a feeling tone of reality. In maintaining a level of emotional pressure, this background, which the psychologists call "affective tone," tells where one is, what the time is, and what is the person's relationship to the world—in short, a private sense of being alive. Ramsdell considered the primitive level of hearing to be the most efficient and indispensable mechanism for "coupling" the constant activity of the human organism to nature's activity. Although this coupling is unconscious, for most background sounds do not reach the conscious level, its loss is what makes the deaf feel so "depressed or caught in a dead world." When background sounds such as the sound of an automobile horn or, in former times, the roar of a lion or buzz of a rattlesnake reach the conscious level, the second level of hearing is reached.

This second level or function of hearing is called the signal or warning level. One must make constant conscious adjustment by this warning function in daily living. Aesthetic experiences such as sounds of nature and music fall here. When hearing is lost at this utilitarian level, the emotional upset is not so great as at the primitive level. Other senses such as more acute visual guidance help to take over.

The third level of auditory function is the social level or symbolic level in which hearing is used to comprehend language. This gives the "frame work for man's higher order of knowledge and in the growing child formalizes and binds social prohibitions and permissions which make up the moral code."

"Hearing" is a combination of all three levels at once. One hears "the symbols of language, the signal of the ringing of the telephone" and reacts to the background of sounds which is not consciously discriminated or present in awareness.

CONGENITALLY DEAF

The psychology of the congenitally deaf child presents a somewhat different picture than that of a previously hearing person. To begin with, this group of children has never established coupling with the "on-goingness" of the world, as Ramsdell[15] termed it, nor enjoyed the primitive level of hearing. Therefore, the congenitally deaf are not depressed by the absence of this coupling as the adult or previously hearing child is by the loss of it. Certain psychologic effects other than depression or feeling of living in a dead world are noted, however. As the child is schooled in lip reading and technique of speech, personality development proceeds. The "prohibitions and permissions which make up the moral code" normally derived from the third or "social level" of hearing are amassed by way of his own communication technique. However, because of the language retardation, there is a retardation in the formation of social groups in the pre-adolescent years, according to studies by Naffin.[11] After that, he found no fundamental differences between deaf and hearing persons in social development. Possible explanation is their improved skill at communication by this time in life.

McAndrew[8] in his study on rigidity and isolation made tests on deaf children utilizing the Rorschach method. He found that their reaction to the test was that of normal children of a somewhat younger age. He believed that this fact suggested they have a shorter life span than the normal because they are partially isolated and consequently less differentiated and more rigid than the normal. Further, he noted that the satiation time for the deaf group was more than twice that for the normal group.

Regarding intelligence of deaf children, Oleron[12] concluded that intelligence of deaf children equals that of hearing children in concrete mental functioning, but they are deficient in abstract intelligence.

DEAF

In considering the psychology of the deaf in general, the discussion will concern three aspects: characteristics, compensation or assets, and adjustment.

Regarding characteristic psychology of the deaf, most authorities agree there is none. However, a noteworthy paradox is readily apparent from their comments. Each states there is none and then proceeds to outline what he considers it to be. Ramsdell[15] stated that the "coupling" to the "primitive level" of hearing is lost in deafness and the person having lost this "affect tone" feels "depressed and caught in a dead world" of silence. There is a tendency to be suspicious and unduly hostile to those around him. Myerson[10] in an experiment whereby the ears of volunteers were plugged for twenty-four hours noted changes of regression, aggression, suspiciousness, bluffing, inappropriate behavior, and restlessness. Day[2] stated of the deaf person, "He broods over his trouble and becomes depressed and despondent."

Pinter, Funsfield. and Brunschwig[14] utilized the Bernreuter Personality Inventory on 126 deaf adults and concluded that the deaf showed greater irritability, introversion, and less dominance than normal persons. On the other hand, Pellet[13] believed that the deaf person shows increased aggressiveness and competitiveness in his relations with other people. Pellet seems to be alone in this viewpoint.

Welles[16] also used the Bernreuter Personality Inventory, testing 225 persons with defective hearing and 148 hearing adults as controls. Conclusions were

that the persons with defective hearing were distinctly more emotional, more introverted, and less dominant than their hearing friends. Zeckel[17] agreed with this view in believing the deafened person becomes suspicious, irritable, and seclusive. Menninger[9] pointed out further the unsatisfactory types of compensation to deafness. These consist of depression, despondency, a feeling of incalculable loss, anxiety, and in some cases marked suspicion. Knapp[5] was adamant in his belief that there is no typical psychology of the deaf. Rather, he thought from his studies that it is the psychology of many persons defending themselves against a sensory handicap which led primarily to difficulty in communication. He pointed out an interesting analogy in support. Men with fused hip joints sit awkwardly and avoid tight rope walking, but no one speaks of a "psychology of ankylosis."

It should be apparent from the representative group of investigators mentioned, in spite of Knapp, that there is in fact a typical psychologic characteristic of deafness. I choose to accept this premise particularly in view of personal experience with the deaf. The deaf, even well oriented, stable personalities, tend to become depressed, seclusive, suspicious, and filled with brooding. It goes without saying that deafness may precipitate a major psychosis in a person with latent or manifest neurosis. This is not of concern, however, in the present discussion, nor is psychoneurotic deafness.

Unsatisfactory compensation to deafness has been mentioned. The same reference (Menninger[9]) stressed the satisfactory types of compensation, namely, "perceptual, intellectual, emotional, and volitional." Paralleling this line of thought Berry[1] listed the assets of deafness. He claimed deafness decreases distractions and increases concentration; it fosters constructive thought; it increases interpretive capacity of other senses. As examples of great men who were deaf and utilized these assets, he gave Sir Joshua Reynolds the painter, Martin Luther the clergyman, and Beethoven the musician.

Regarding adjustment to deafness, Ramsdell[15] again sounded the keynote by stating, "Psychologically speaking, no permanent adjustment is possible until the individual realizes that the cause of his depressive state lies in the loss of the primitive auditory function and until he faces the practical difficulties imposed by the loss at the two higher levels." Berry[1] believed that in the last analysis adjustment must be from within, not from without, and that each person has the power to attain this adjustment and through it serenity for himself and happiness for his friends. In a symposium presided over by Lederer[7] on a related subject, Miriam Pauls voiced the opinion regarding deafness that the basic problem is one of psychosocial adjustment. Everything hinges on the attitude of the person himself regarding his hearing loss.

Day,[2] himself profoundly deaf, agreed with the dictum of others (Berry, Shambaugh, and so forth) that the psychologic adjustment to deafness is in assisting the person to pass through the psychologic storm of refusing to admit the truth and to emerge into the calm of acceptance of the handicap.

Again, adjustment may be in one of the following forms: some type of therapy such as fenestration operation, successful use of a hearing aid, psychotherapy, or the mastery of lip reading. Some of these persons, however, overcompensate in the sheer elation of their newly found release. In my experience patients in whom fenestration has been performed react often with a euphoric, hypomanic response. However, the very act of submission to the operation or of the purchase of a hearing aid in cases in which operation has not been performed indicates acceptance of the handicap, itself a certain insight. Thereby it affords a "mental catharsis" or mode of ventilation.

HARD OF HEARING

In many references hard of hearing is used interchangeably with the term deaf. This is not the case according to the definitions by Landis and Bolles[6] noted previously. From the context of most references, however, it is clear that the persons referred to as hard of hearing fall into the accepted classification of the deaf, namely, "those in whom the sense of hearing is non-functional for the ordinary purposes of life." Therefore, almost by definition, the psychology of the hard of hearing would be that of the well adjusted deaf. The difference is one of degree. The nearer the hard of hearing approaches deafness, the more is the tendency toward the depression, suspicion, seclusion, and other typical reactions. Should the benefit from fenestration surgery or hearing aid prove permanent, then the hard of hearing present no psychologic problem. Especially is this true in the hearing aid user or person treated by fenestration because the act of accepting deafness and the need of help represents insight and a resolution of the conflict.

For another reason, the aged deaf are protected from psychologic disturbance noted in the younger deaf. With most of life behind, the trend according to Zeckel is to "conservatism, loneliness, and skepticism as being physiologic." They often develop an apathetic, philosophic attitude and hence resolve any conflict before it arises.

SUMMARY

An acceptable definition of the deaf, congenitally deaf, and hard of hearing has been noted. Ramsdell's

three psychologic levels or functions of hearing have been given as auditory background or primitive level, the signal or warning level, and social or symbolic level. The psychology of the congenitally deaf child, deaf and hard of hearing adults, and the aged has been discussed. The congenitally deaf child lacks the depression and suspicion which is typical of the deaf in general and to a lesser degree the hard of hearing, the latter having in the main compensated well for their impairment. Psychology of the deaf has been considered from the aspects of characteristics, compensation or assets, and adjustment (insight by the person or therapeutic means).

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BACTERIAL HYPERSENSITIVITY

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STUDIES in bacterial hypersensitivity were prompted by observation of a large number of patients in whom bacteria appeared to play an etiologic role in the establishment of various types of clinical allergy. Bacterial infection also may act nonspecifically to lower the resistance of the patient so that allergic disease can occur more readily. This is suggested by the fact that when allergy to extrinsic factors is controlled, the patient is able to withstand episodes of infection without subsequent flare-ups of his hay fever, asthma, or angioneurotic edema. Frequently, the incidence of respiratory infections is decreased markedly. However, there remains a large group of persons in whom bacteria appear to play a different role. The present study was stimulated by this large group of patients who had failed to respond to any other type of therapy.

TYPES OF BACTERIAL ALLERGY

One must clarify the type of reaction referred to when he speaks of bacterial allergy. A distinction must be made between the anaphylactic or atopic type, the Arthus type, and the tuberculin or delayed type.[7]

Characteristics of the atopic type include an immediate wheal type of reaction and the presence of circulating skin sensitizing antibodies which can be transferred passively to another person and still retain the ability to react with the original antigen. Anatomically the locus of reaction occurs chiefly in and around the blood vessels. Clinically this group is represented by asthma, hay fever, urticaria, eczema, angioneurotic edema, and serum reactions.

In the Arthus type, an inflammatory reaction takes place at the site of subcutaneous injection of antigen following a series of injections. Reactivity is dependent upon a high level of circulating antibody, and in extreme cases, the reaction may progress to necrosis.

The tuberculin type of reaction is produced usually after sensitization by actual bacterial infection. No circulating antibodies can be demonstrated, and the skin test reaction is delayed. Sensitization of the anaphylactic type has been demonstrated in animals with protein derivatives from the tubercle bacillus, various chemical fractions of Streptococci, and protein derivatives of other bacterial organisms. The immediate wheal type of skin reaction characteristic of atopic hypersensitivity has been demonstrated in patients with tuberculosis, brucellosis, glanders, and so forth. However, the histopathologic picture in any of these

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diseases in which the pathogenesis has been proved to be due to allergy to the causative organism is never typical of that found in the group of diseases comprising asthma, hay fever, urticaria, and similar disorders. Positive skin reactions to bacterial products in this group of diseases will be discussed later.

MECHANISM OF SENSITIZATION

Schwentker and Comploier[6] have shown that complement fixing antibodies were found in rabbits following repeated injections with mixtures of rabbit kidney and Streptococcus toxin. An antigenic factor may be formed by combination of a bacterial fraction with some protein from the respiratory tract in the type of patient studied in this paper. Experimentally in the guinea pig, Malkiel and Hargis[3, 4] have demonstrated that certain bacteria markedly increase the degree of sensitization to certain innocuous protein substances. That this is not merely a nonspecific adjuvant effect is demonstrated by the high degree of selectivity of the reaction attained. Whether a similar enhancement of sensitization to nonbacterial antigens by the presence of certain bacteria occurs in the patient is not known.

CLINICAL PATTERNS

The usual course observed after an infection of the upper respiratory tract in patients of the type observed in this study may follow one of two patterns. The more common type is characterized by a flare-up of the allergic condition, either with or immediately after the onset of the respiratory infection. Such symptoms are likely to persist for several days to several weeks and then generally clear up. In children there is frequently a definite periodicity of such attacks associated with seasonal changes, particularly during the fall, winter, and spring of the year.[5] In this group, therapy with bacterial vaccines may accomplish two purposes: (1) an increase in resistance to infection and (2) hyposensitization to organisms to which the patient previously has become sensitized.

Gradations of the clinical picture ranging from intermittent to chronic allergic manifestations have been observed in these patients. Most frequently they have active allergy during the time of the year when acute respiratory infections are at a peak. In some of the patients studied, allergic manifestations occur only in association with a recognizable acute infection. However, in many patients allergic manifestations continue throughout the late fall, winter, and spring with or without associated acute infection. Many of these patients are unable to determine whether or not they have a "cold" all during this time of the year.

Finally, some of the more severe allergic problems in this latter group are associated with detectable foci of infection of long standing and with some of the chronic pathologic changes which include thickening of the muscle walls of the bronchioles, changes in the basement membrane, and destruction of collagenous fibers. In these patients the physician must seek evidence of persistent foci of chronic infection. Blood counts, sedimentation rates, antistreptolysin titers, and extensive bacteriologic studies may be of value. In patients of this type who show evidence of infection, a bacterial hypersensitivity may be suspected more readily than in the absence of this criterion. Eradication of foci of infection in sinus membranes, teeth, tonsils, gallbladder, or elsewhere is of extreme importance, although it is frequently difficult to detect discrete foci.

DIAGNOSTIC TECHNIQUES

Bacteriologic studies have been performed on the nose, throat, and frequently on the sputum of most of the patients in this series. Generally these studies have been done at the onset of an actual attack of the type for which the patient is being observed. Comparison of cultures at the onset of an attack, or when there is a marked increase of symptoms in patients with a more chronic type of allergy, frequently yields valuable information. Often this information helps in an attempt to interpret whether the patient has a primary infection or an acute allergic attack with superimposed infection. In addition, comparison with the flora obtained on previous examination and correlation with clinical findings is valuable in the interpretation of the role of bacteria in allergic disease. Limitation of facilities has restricted the number of repeat examinations. However, a more exhaustive program of this type in each patient under study is now under way.

Cutaneous reactions to bacteria and bacterial products have been included as part of the attempt to correlate the studies in patients presented here. Many problems offer themselves along these lines. Patients frequently display a multitude of positive immediate and delayed reactions to stock bacterial vaccines. This is readily understandable when one considers the numbers of different types of bacteria to which a person is exposed during his lifetime, some pathogenic and others saprophytic. In studies now being conducted I am treating patients with the autogenous filtrate prepared from a single strain of organism chosen on the basis of serial culture studies and skin reactions. Immediate wheal reactions are much more common when filtrates are used than when the whole bacterial vaccine is employed. The presence of soluble antigens as well as irritants from metabolic bacterial products may explain this difference.

Delayed reactions do not necessarily indicate a

tuberculin type of hypersensitivity since frequently there are used particulate antigens which may require a considerable length of time for the body to release a suitable soluble antigen. Combination of one of the injected bacterial constituents with a tissue protein may be responsible for delay in appearance of the reaction. Animal experimentation by Cavaleti[1, 2] and others has demonstrated that Streptococci can act as allergens to induce anaphylactic sensitivity by such a mechanism.

As is the case with food antigens, positive reactions not only may indicate that the item tested was the agent responsible for the clinical manifestations but also can indicate a preclinical, subclinical, or postclinical sensitivity.

In addition to skin reactions, many other criteria may be used for determining the significance of any particular bacterial agent in the eliciting of an allergic manifestation. Do results of skin tests correlate with bacteriologic findings from the nose and throat during the attacks under suspicion? Can the sensitivity be transferred passively to another person? Do systemic reactions occur in the course of treatment? If so, do they reproduce the type of picture observed clinically: fever, local inflammation, and focal exacerbations of infection in the tuberculin type of hypersensitivity; asthma, hay fever, urticaria, and angioneurotic edema in the atopic type of hypersensitivity?

In the present series of patients vaccines were prepared from the secretions of the nose, throat, and sputum and standardized on the basis of nitrogen content. Skin testing was performed with bacterial vaccines, with filtrates from the autogenous organisms, and with stock filtrates from many of the common bacteria.

THERAPY

Therapy with various types of bacterial preparations has been carried out for the past two years. Treatment mixtures were prepared from autogenous organisms, stock filtrates to which the patient showed skin reactions which appeared to be immunologically significant, and the autogenous filtrates of the patients studied. Fifty-eight of these patients previously were treated unsuccessfully with a stock bacterial vaccine prepared from the respiratory tracts of 200 persons suffering from acute or chronic respiratory complaints. In this fashion an effort was made to include other organisms to which the patient demonstrated sensitivity as well as those isolated from his own secretions.

Study of the filtrates, rather than the bacterial body itself, because of some of the theoretic considerations involved, seems to offer an interesting approach to the role of bacteria in human hypersensitivity. The multiple skin reactions to filtrates of various strains of Staphylococci as compared to fewer

TABLE 1.—*Results of Treatment of 65 Allergic Patients with Bacterial Antigens and Filtrates.*

Clinical Difficulty	Results of Therapy*	Patients Studied	Duration of Therapy (months)
Atopic dermatitis	+++	1	8
Asthma and chronic bronchitis	0	2	2½, 2½
	+	2	6, 14
	++	3	3, 14, 7
	+++	1	12
Allergic rhinitis	?	1	1½†
	0	1	5
	+	4	4, 4½,‡ 18, 5
	++	2	12, 15
	+++	1	4
Cough and allergic rhinitis	0	1	4
	+	1	3
	++	1	24
	+++	4	12, 12, 14, 24
	++++	1	15
Angio-edema	+	1	4§
	++++	1	23‖
Asthma	0	3	2½, 13, 6¶
	+	2	2, 14
	++	5	2, 2, 12, 12, 24
	+++	3	12, 13, 14
Asthma and allergic rhinitis	0	3	14, 14, 15
	+	6	4, 4, 9, 22, 24, 14**
	++	8	3, 3, 9, 12, 14 15, 12, 12
	+++	2	8, 10
Asthma, allergic rhinitis, and emphysema	0	2	18, 2½††
	+	1	3½‡‡
Recurrent parotid swelling	?	1	2§§
	++++	1	4½

*0 = No definite improvement.

\+ = Condition moderately improved. Less intense symptoms still present. Recurrent allergic attacks less severe and usually less frequent. Loss of time from work or school minimal.

++ = Marked improvement. Symptoms minimal; no disablement.

+++ = Results as in ++ group maintained for a longer period than appears compatible with normal variation noted in clinical history.

++++ = Cleared for at least one year with or without continued treatment.

† Treatment discontinued; no follow-up possible.

‡ Nasal polyps forming every few weeks; no new formation for past two months.

§ Improved after two months of therapy; marked flare-up with abscessed tooth; improved again after drainage.

‖ Refer to text for details.

¶ Cleared for four months and then recurred.

** Improvement associated with psychiatric care.

†† Pustular dermatitis which flares up frequently immediately following treatment but does not respond to antibiotics.

‡‡ Some increase in vital capacity; asthma markedly diminished; still disabled by emphysema.

§§ No recurrence from the time treatment began. No evaluation possible.

reactions to filtrates of organisms capable of producing exotoxins or organisms of higher pathogenicity is suggestive. Further, the correlation of these reactions with the number of positive cultures obtained from the patients studied is high. The ubiquity of these organisms along with the increased tendency for allergic patients to become sensitized to foreign proteins would fit in with the previous observations.

RESULTS

The results of the treatment of 65 patients with bacterial antigens and filtrates is shown in table 1. Twelve patients either failed to respond or their responses were questionable because of development of various degrees of remission which could be compatible with the fluctuant course characteristic of allergic disease. Fifty-three patients who showed definite improvement are graded.

The largest number (89) of positive skin reactions were elicited by various strains of Staphylococci. An equal number of positive cultures were obtained to the various Staphylococci and to alpha hemolytic Streptococci. However, the numerous cultures containing only small numbers of a particular strain were eliminated. These occurred in a majority of the cultures.

DISCUSSION

In this study autogenous and stock bacterial preparations were used. Autogenous vaccines and filtrates were prepared from cultures of the nose, throat, and sputum of the patients studied. In addition, stock bacterial filtrates were employed in treatment, based on the individual's skin test reactions to these filtrates. Also used was a pooled vaccine containing organisms isolated from persons in the Houston area displaying chronic or recurrent respiratory infections, with or without associated allergy. The intention was to include all possible responsible bacterial allergens in order to compare the results with those obtained in these same patients using only the pooled stock vaccine. The results indicate that more than three-fourths of the patients definitely were improved. These patients had been refractory to all other previous therapy including specific hyposensitization to extrinsic allergic factors.

The short period of time over which these patients were observed appears to be inadequate to evaluate any form of therapy in a chronic disease such as allergy. However, in the allergic conditions under consideration in this report the same cycle may not recur in the same patient in a period of ten to fifteen years. Thus difficulty of evaluation, regardless of the length of observation, is inherent in dealing with a disease having such a course. To offset this difficulty, a practical clinical consideration appears to apply in this series. It is a common observation among physicians treating large numbers of allergic patients that early response to specific hyposensitization apparently is an important indication of the patient's probable eventual response to long-term therapy. Seasonal hay fever sufferers frequently will show improvement after a few treatments with the specific allergen involved, and a large percentage of these patients will maintain their good results. Further, there appears to be little correlation with the degree of skin sensitivity or the level of antigen injection that has been attained. It was this same type of early response noted in the majority of successfully treated patients in this series which suggested that a specific mechanism was involved.

Until there is further elaboration of some of the basic mechanisms of the anaphylactic or atopic type of bacterial hypersensitivity in man, approaches to clinical investigation of this problem will continue to be on a more or less empirical basis. However, one particular patient observed in this study seemed to illustrate the presence of a specific mechanism.

TABLE 2.—*Skin Test Reactions to Bacterial Filtrates in 25 Patients.*

Test Organism	Positive Reactions
Streptococcus viridans	62
Staphylococcus (albus and aureus)	89
α–Hemolytic Streptococcus	22
β–Hemolytic Streptococcus	31
Pneumococcus	44
Salmonella paratyphi A	7
Shiga dysenteriae Flexner Z	27

This patient had a history of urticaria and angio-edema for seven years. In addition, she gave a story of having had dysentery many years previously. Agglutination studies on the serum showed a 1:160 agglutination against Salmonella paratyphi A and 1:40 against Salmonella typhosa. She also gave a 2 plus reaction to an intracutaneous test with a filtrate of S. paratyphi A. Therapy with antibiotic drugs brought no relief. Subsequently the patient was started on a program of hyposensitization to a filtrate of S. paratyphi A. During the early phase of therapy she experienced frequent exacerbations of her difficulty, which generally appeared within two to four hours after the administration of the filtrate. The patient was under treatment for fifteen months and has been observed without treatment for another ten months. She has had no recurrence of her difficulty since five months after starting treat-

TABLE 3.— *Positive Cultures Obtained from the Nose, Throat, and Sputum of 25 Patients.*

Organism	Positive Cultures
Neisseria pharyngis	25
Hemophilus	5
Staphylococcus	28
α–Hemolytic Streptococcus	27
β–Hemolytic Streptococcus	21
Hemolytic Staphylococcus aureus	19
Pneumococcus (7 patients)	9
Pseudomonas	3
γ–Hemolytic Streptococcus	15

ment. The longest time without a flare-up previously was two days.

Laboratory studies on filtrates used for diagnostic purposes have not been conducted. By means of the present clinical studies as well as additional ones that are planned, the laboratory approaches that appear to lend themselves to critical evaluation of the role of bacteria in relation to the production of clinical allergic disease will be chosen. Nitrogen determinations, nucleic acid content as evidenced by ultraviolet absorption, and protein fractionations may be of value on filtrates prepared by various methods. However, the influence of the culture media, whether human cells in tissue culture or conventional bacteriologic media, represents a considerable problem.

I do not believe that these clinical studies have proved conclusively that bacterial allergy can cause clinical allergic diseases. However, I do believe that therapy with bacterial agents has some value in this group of diseases under the circumstances set forth. Prolonged observation of this type may help to predict more accurately the applicability of such therapy.

CONCLUSIONS

Sixty-five patients presenting allergic symptoms manifested chiefly during the late fall, winter, and early spring were studied. Bacteriologic cultures of the nose and throat were correlated with skin reactions to stock and autogenous vaccines and filtrates. The effect of therapy with bacterial vaccines and bacterial filtrates in this series is reported.

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CASE REPORTS

Penicillin Anaphylaxis

Case Report

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IMMEDIATE or anaphylactic shock and delayed serum sickness reactions have been a serious hazard to parenteral therapy since the introduction of horse serum preparations. This problem has been multiplied many times during the past few years as our parenteral armamentarium has increased vastly, and it remains a potential, constant hazard to the practicing physician.

Anaphylaxis occurs as an antibody-antigen reaction. Evidence indicates this reaction takes place only in the tissue cells and not in the blood plasma.[1] Primarily the person must be made susceptible by the previous introduction of a sensitizing dose of the antigen. In many instances he may require many injections or topical applications of the allergen. It is now generally accepted that the antigen-antibody reaction in some way brings about the liberation of histamine by the affected tissues and that the action of this amine is responsible for the anaphylactic manifestations.

The first death due to penicillin anaphylaxis was reported by Waldbott[5] in 1949. His patient had received penicillin treatment on three occasions. Following the injection of 50,000 units of crystalline penicillin, the patient collapsed and died within a few minutes. Waldbott recommended skin testing in all patients who had received previous treatment with penicillin. A good review of this problem has been done by Feinberg[2] and Mayer.[3]

Although the literature contains but relatively few reports of penicillin anaphylaxis, it is reasonable to infer that this problem is much commoner than generally believed and will become even more of a problem as more persons are sensitized to penicillin through the use of the many varieties of penicillin therapy.

Penicillin anaphylaxis is a medical emergency that must be met with rapidity of action, and the physician must be prepared to treat this emergency as

long as drugs are used that potentially may produce anaphylaxis.

CASE REPORT

C. L. M., a 39 year old white man, was seen December 9, 1954, complaining of a sore throat and running nose. His past history was negative for allergies of any type. He had received approximately twelve injections of procaine penicillin prior to a dose given on the aforementioned date. The injection immediately preceding was given thirty days before with no untoward results.

The patient was given 400,000 units of procaine penicillin in the deltoid muscle with prior aspiration of the syringe plunger. Approximately sixty seconds later the patient complained of tingling all over, vomited twice, stated he "couldn't breath," and collapsed. The conjunctivae were congested intensely. The blood pressure and pulse were unobtainable. Respiration was gasping and a few high pitched rales could be heard in the chest, but there were no normal breath sounds. The patient became incontinent. One cc. of 1:1,000 epinephrine was given intramuscularly. One hundred mg. of cortisone in 300 cc. of normal saline solution was given intravenously. Oxygen administration was started. Intermittent injections of epinephrine were given in doses of 0.5 to 1.5 cc. intravenously at periods of three to five minutes. The first obtainable blood pressure was 50/20 forty minutes after the penicillin was injected. About the same time the patient aroused enough to groan, and after a few minutes he complained of extreme dyspnea. This was controlled with 0.5 doses of epinephrine intravenously given according to the patient's complaints of dyspnea. One hour later the patient was still cyanotic, with blood pressure 60/30, but he had regained consciousness enough to state that he felt better but was still having intermittent bouts of dyspnea that were controlled by epinephrine. Ephedrine 50 mg. then was given intravenously every five minutes until the blood pressure was 80/30. Three doses were given. Wyamine Sulfate 15 mg. was given intravenously every five minutes for two doses. The blood pressure then was recorded as 110/70, and the patient's cyanosis was gone; he stated he felt much better but very weak and sore in his joints. His tongue and upper lip were swollen. Oxygen was discontinued, and the patient did not require further treatment although hydrocortisone 20 mg. was given twice daily for six days.

COMMENT

It appears that with the increasing use of penicillin more anaphylactic reactions are to be expected. Therefore all practicing physicians must anticipate, recognize, and immediately treat these potentially fatal reactions.

In some of the cases[4] reported in the literature epinephrine has played a dominant role in those patients that have recovered. It also has been recommended that this drug be given intravenously because of the profound circulatory collapse present in these patients. Intravenous cortisone seemed to be of definite benefit in this particular case. The oxygen was of no use until the obstruction was relieved at the level of the bronchioles.

Probably the prevention of such reactions will depend largely upon several factors: (1) stopping the indiscriminate use of penicillin preparations, especially lozenges, ointments, gargles, tooth pastes, and gums; (2) protecting patients that are sensitive by giving them cards[6] stating they are sensitive or possibly tattooing them; (3) interrogating patients concerning penicillin sensitivity before using penicillin therapy; and (4) using a skin test in those persons suspected of being sensitive to penicillin.

SUMMARY

A case of nonfatal penicillin anaphylaxis has been reported. The value of immediate recognition and vigorous treatment is stressed. Methods of avoiding such reactions are mentioned.

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High Frequency Sound Waves Used to Ease Pain

High frequency sound waves have been used to relieve the unbearable pain of patients suffering advanced malignant diseases, a physician has reported. Ultrasonic radiation was used to seal off a small portion of the brain in 17 patients as a substitute for similar treatment previously undertaken by surgery, Dr. P. A. Lindstrom, University of Pittsburgh School of Medicine, said in the October *Archives of Neurology and Psychiatry.*

Dr. Lindstrom said results of the tests indicated that the technique also could replace this type of surgery in patients with some mental diseases, eliminating certain unfavorable side effects of surgical lobotomy. Ultrasonic treatment caused no complications or ill effects, and no apparent tissue damage was shown in studies of the brain.

Ten of the 17 patients, who had been suffering excruciating, uncontrollable pain, were given practically complete relief for weeks to months after treatment and were able to discontinue previously heavy narcotic medication. Other patients felt decreased pain and were comfortable a good deal of the time; 1 case was a failure.

The major advantage, according to Dr. Lindstrom, was that there was little apparent tissue damage in the brain as may occur in surgical lobotomy.

Few medical men are aware of the great importance of the art of listening, which is the secret basis of the physician-patient relationship, and the best introduction to every therapy.—G. Kraus, WHO Newsletter, December, 1954.

DISSECTING ANEURYSM with MARFAN'S SYNDROME

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THE majority of patients with dissecting aneurysm are middle aged or elderly hypertensives with a fairly typical symptomatology. However, the diagnosis occasionally will be missed if it is not borne in mind that a considerable percentage (varying from 24[4] to 38[1] per cent in different series) of cases of dissecting aneurysm occur in people less than 40 years of age, usually without hypertension and frequently with associated congenital anomalies. The case that we are reporting is a dissecting aneurysm associated with Marfan's syndrome.

Marfan's syndrome is characterized by widespread disturbances in the development of tissues of mesoblastic origin. Patients showing the complete picture of this syndrome are abnormally tall and slender with disproportionately long limbs. The fingers are long and spider-like, the face is long and thin, the jaw juts forward, the palate is high and arched, and the musculature is poorly developed. The ligaments are lax, permitting unusual mobility of the joints. These patients may have kyphosis or scoliosis, be pigeon breasted, or have funnel chests. Ocular abnormalities, including congenital bilateral dislocation of the lens, occur in 50 to 75 per cent. Myopia is the rule. Cardiovascular lesions occur in 30 to 60 per cent. The accompanying list of cardiovascular lesions in 34 patients with arachnodactyly (table 1) is taken from an excellent article on this subject by Goyette and Palmer.[2] Several patients had multiple lesions.

CASE REPORT

A 33 year old World War II veteran was admitted to the hospital August 12, 1954, in congestive failure. He had been in fairly good health until February. At that time he complained of nausea, anorexia, and mild pain in the right side of the chest. Following a bout of hemoptysis he was hospitalized. A diagnosis of virus pneumonia was made and antibiotics were given. The attending physician found cardiac enlargement and an aortic murmur. When the acute episode had subsided, the patient was referred to a cardiologist. At that time the patient was very weak and had dyspnea on slight exertion. The cardiologist made a diagnosis of rheumatic heart disease with aortic insufficiency and initiated treatment for congestive failure. On July 28 the patient had a cerebrovascular accident with acute onset of confusion and partial aphasia. His congestive failure became worse. He was again seen by the cardiologist, who made a diagnosis of pulmonary and cerebral embolism in addition to the rheumatic heart disease and recommended hospitalization.

Physical Examination.—On admission the patient was a very tall (6 feet, 6 inches) asthenic white male, dyspneic and slightly cyanotic. He was markedly pigeon breasted, had kyphosis of the thoracic spine, and had extremely long, narrow hands with fingers extending 5 cm. beyond those of the examiner, whose hand is of average size. The patient was somewhat confused and had difficulty in finding words to express himself. The positive physical findings follow: Moist rales were heard at both lung bases, enlargement of the heart was evident to the right and left, blood pressure was 150/60, and aortic systolic and diastolic murmurs were noted. The liver edge was palpated 3 fingerbreadths below the costal margin, and there was 1 plus edema of the right foot. The tendon reflexes were hyperactive, and there was questionable right hemiparesis.

Roentgen-Ray and Laboratory Findings.—A chest roentgenogram August 13 showed a tremendous increase in transverse diameter of the heart, which measured 20 cm. in diameter. There were increased markings at the right base, some of which represented areas of plate-like atelectasis. The right costophrenic sinus was hazy. There was no evidence of either recent pulmonary or pleural lesions. An electrocardiogram suggested a left ventricular strain pattern. The blood count and urine were normal. There was no anemia, and serologic studies were negative.

TABLE 1.—*Cardiovascular Lesions in 34 Patients with Arachnodactyly.*

Aortic lesions		22
Dissecting aneurysms	12	
Fusiform aneurysms	7	
Dilated aortic ring	3	
Endocardial lesions		21
Valvular	21	
Mitral	15	
Aortic	10	
Tricuspid	2	
Unspecified	2	
Mural	2	
Combined aortic and endocardial lesions		13
Septal defects		9
Patent foramen ovale	7	
Interauricular	1	
Patent ductus arteriosus	1	
Dilated heart		1
Normal heart		1

After Goyette, E. M., and Palmer, P. W.: Cardiovascular Lesions in Arachnodactyly, Circulation 7:373-379 (March) 1953.

Course in Hospital.—We concurred in the diagnosis made by the referring cardiologist and continued the patient on measures to control his congestive failure. Despite these measures he continued dyspneic and somewhat cyanotic. On August 20 he developed severe pulmonary edema and died.

Autopsy Findings.—At autopsy the heart was found to be enlarged, weighing 700 Gm. There was hypertrophy of the myocardium, particularly of the left ventricle. The valves were normal except for scarring of some of the mitral valve leaflets, but there were no vegetations. The orifices of the coronary vessels were patent, and there was no evidence of occlusion. The outstanding lesion was a dissecting aneurysm starting at the level of the aortic valve and extending throughout the entire course of the aorta and down the left iliac artery to its bifurcation (fig. 1a and b). The dissection half encircled the aorta, but the aortic branches were intact and showed no occlusion. The walls of the dissected channel were smooth and appeared to be endothelialized. A

From the Medical Service, Veterans Administration Hospital.

large perforation, or tear, was found in the aorta 1.5 cm. distal to the left coronary orifice (fig. 1c). This was rectangular, measuring 1.5 cm. by 5 mm., and communicated with the dissecting aneurysm. The inner circumference of the aorta 2 cm. beyond the aortic valve measured 7 cm. There was a thin rim of fibrous-like tissue suggesting a coarctation of the aorta 9 cm. distal to the aortic valve. The inner circumference of this ring was 2.2 cm. The inner circumference of the thoracic aorta beyond the coarctation was 4 cm. and of the abdominal aorta, 3.5 cm. There was no evidence of a second opening into the aorta nor of a rupture of the dissected channel. In addition to these findings there was pulmonary infarction, left lower lobe; bilateral pleural effusion; and marked congestion of the liver.

Following the autopsy the family was questioned again in an effort to elicit some history of acute chest pain since it was thought that the mild chest pain in February was due to pulmonary infarction. The patient had lived with his mother all his life except for his Army service. His mother said that he had never complained of any chest pain until the onset of the present illness. His Army medical record was obtained. Both induction and discharge chest roentgenograms were entirely negative. No murmurs were noted on physical examination. The patient was hospitalized twice, once for mumps and once for dental treatment. There were no other entries on his medical record.

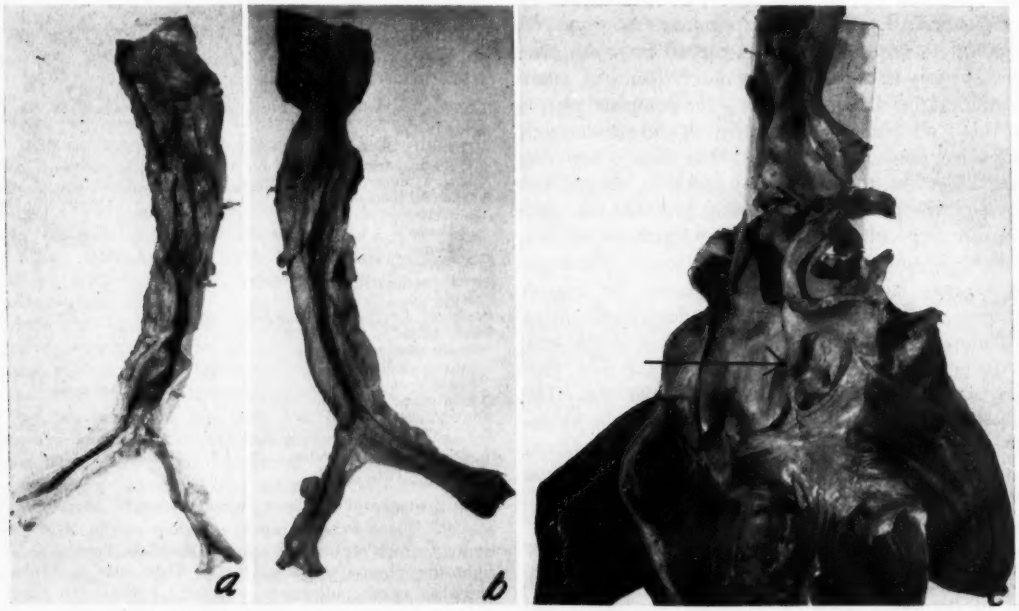

FIG. 1. Views of the aorta, (*a*) dissected channel, (*b*) normal channel, and (*c*) showing the intimal tear.

DISCUSSION

In Gore's report[1] on 32 cases of dissecting aneurysm in patients less than 40 years of age, he noted several points of difference between cases in the younger and older age groups. In persons over 40 the degenerative process in the aorta affected primarily the muscle layer while in the younger age group it affected the elastic lamellae of the media. The intimal tear was more often in the ascending aorta in the younger group (77 per cent versus 53 per cent in the patients past 40). The intimal tear was most frequently transverse in the older group while half were longitudinal in the younger group. Diastolic hypertension was found in only 3 of 32 patients under the age of 40 but was present in 85 per cent of those over 40. Gore found a high incidence of congenital anomalies in his series, 18 of 32 cases. Among the anomalies found were 7 instances of bicuspid aortic valve, 2 of coarctation, and 1 each of coarctation and arachnodactyly, bicuspid aortic valve and coarctation, bicuspid aortic valve and widely patent foramen ovale, malformed tricuspid valve, widely patent foramen ovale and Meckel's diverticulum, arachnodactyly, patent ductus, and polycystic kidneys.

Acute dissection of the aorta is characterized by the sudden onset of excruciating chest pain radiating to the back. There is usually fever and moderate leukocytosis, and progressive anemia may develop. Minor degrees of shock are frequent, but severe shock is uncommon. Occasionally progressive aortic enlargement is noted on roentgenograms. There is no typical electrocardiographic picture. A diastolic aortic murmur may develop following the dissection. If the patient survives the initial tear, endothelialization of the dissected channel may occur and the patient may recover. However, a large percentage[8] of these will

die of congestive failure after varying periods of survival.

As emphasized by Levine and others,[3] extensive aortic dissection may occur without pain. When the patient is seen in the chronic stage with aortic murmurs and congestive failure and no history of acute chest pain, the diagnosis of rheumatic aortic valvular disease is almost always made as in the cases they reported and in the case we are reporting. However, the clues that should suggest the proper diagnosis are usually present.

CONCLUSION

A case of Marfan's syndrome with dissecting aneurysm, the diagnosis of which was not made antemortem, is presented. It appears in retrospect that this diagnosis can be made if the condition is borne in mind when one is confronted by a patient with the physical habitus and cardiac abnormalities described. With the rapid improvement in vascular surgery it eventually may be of more than academic interest to diagnose dissecting aneurysm in the younger age group.

The authors wish to thank Dr. Jarrett E. Williams for his help in the interpretation of the histologic sections.

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Meckel's Diverticulum with Peptic Ulceration, Perforation, and Associated Intussusception

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MECKEL'S diverticulum in children assumes surgical importance when it is the site of inflammation, bleeding, intestinal obstruction, intussusception, perforation, tumor formation, or gastric or pancreatic tissue ectopia. Since a Meckel's diverticulum occurs in about 2 per cent of people, and its complications almost exclusively in children, the abnormality often enters into the clinical and the surgical diagnosis of abdominal disease in children. In the past five years the senior author has noted a Meckel's diverticulum in 5 children and in 1 adult at the time of abdominal surgery.

In the 1 case in an adult the diverticulum found during operation for sigmoid diverticulitis was inverted by interrupted catgut sutures. It did not have a definite mesentery. In 2 of the cases in children the diverticulum consisted of a pouch about 1 cm. long with a base about 1 cm. in diameter and appeared harmless, and, as other pathologic conditions accounted for the patients' symptoms, the diverticula were not disturbed. Neither of these diverticula had a definite mesentery. The third and fourth cases in children occurred in a 13 year old boy and in an 8 year old girl. In each case the condition definitely was considered preoperatively, and in each the diverticulum was about 3 cm. long and 1 cm. wide, so each was excised. A definite mesentery was present in each case, but no ectopic tissue was found on microscopic examination.

The fifth case in a child is reported hereafter at greater length.

CASE REPORT

C. C., aged 21 months, was seen in October, 1953, because of severe abdominal pain, vomiting, and fever. This child had rather sudden onset about 9 p. m. of colicky abdominal pain and vomiting. His mother gave him an enema, and he passed some flatus and a small amount of firm stool. Another enema was given without results other than return of some of the enema water. The abdominal pain seemed to occur in paroxysms, with the child fairly quiet between times. No blood had been passed. The child was seen by the family physician (S.W.T.) and admitted to the hospital with a diagnosis of "acute surgical abdomen."

On examination at the hospital the child appeared pale and acutely ill. The rectal temperature was 100.4 F. The abdomen was slightly distended, diffusely tender, and moderately rigid, more on the right. An abdominal mass was not palpated. Rectal examination was essentially negative, there being no mass, no visible blood, but only some small pieces of firm stool and some yellowish water. The urinalysis and the leukocyte count were normal, but the erythrocyte count was only 3,500,000 with only 6.5 Gm. of hemoglobin. A tentative diagnosis of intussusception was made. A nasogastric tube was passed, transfusion of 100 cc. of blood was given, penicillin was given intramuscularly, and the child was taken to the radiology room. The roentgen-ray findings are demonstrated in fig. 1 with the radiologist's (L.L.L.) interpretation.

The acutely ill, crying baby seemed to be considerably

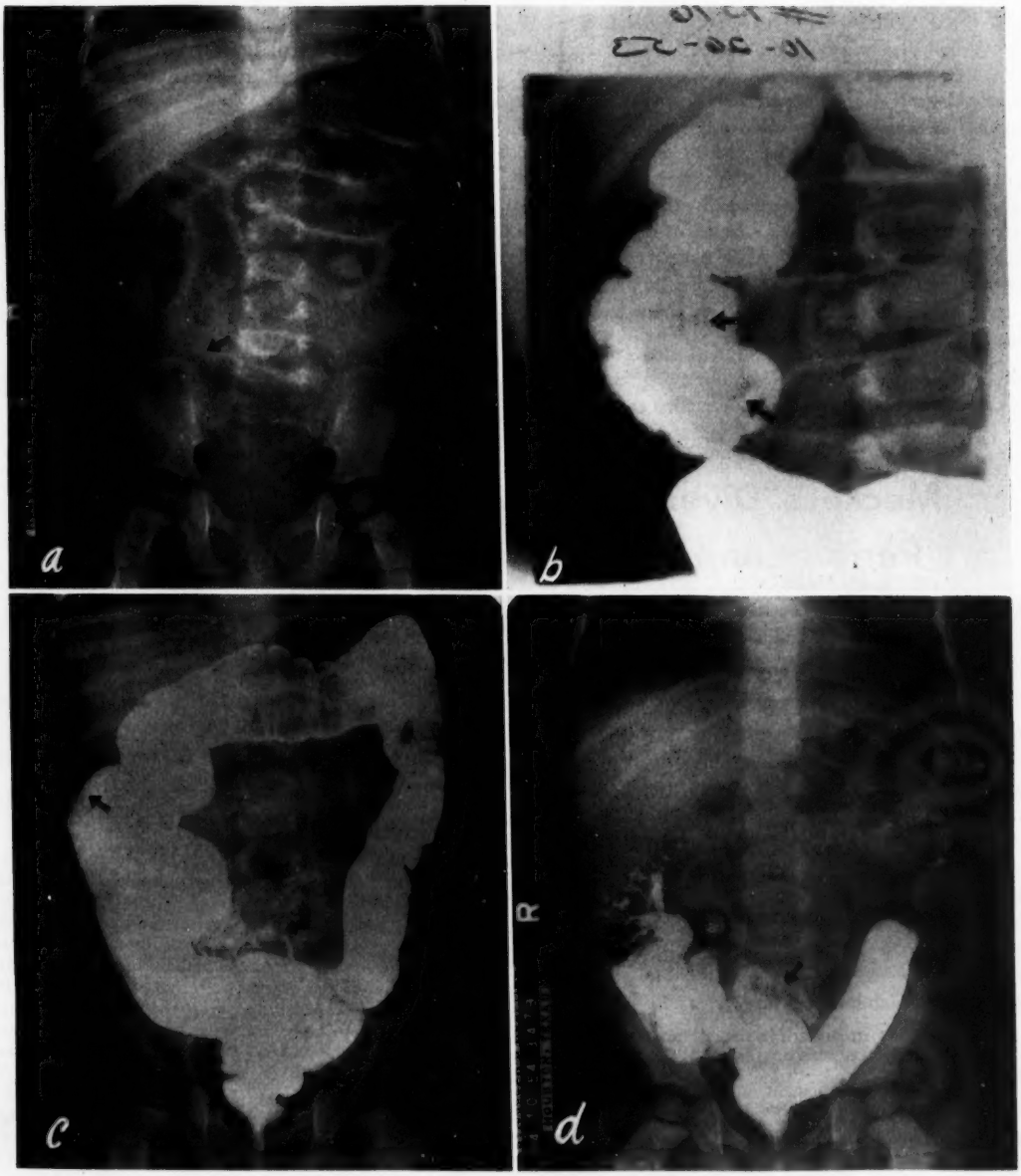

FIG. 1. Radiologic studies in a 21 months old child.

a. Flat plate. The significant findings are the absence of gas in the cecal area and the distended loops of small bowel, indicating some obstruction. The loop of small bowel that is present in the lower midabdomen, in the region of the umbilicus, suggests the "bird beak" deformity that is commonly described in intussusception. This distention which represents the intussusceptum is just proximal to the obstruction.

b. Barium enema study. This roentgenogram shows the point of initial obstruction during the injection. The radiolucent areas represent the intussusceptum. The small bowel distention is further demonstrated.

c. Barium enema study. Further gentle pressure of injection shows the classical "spring wire" appearance of the intussusception. The radiolucent area in the terminal ileum clearly demonstrates the intussusceptum. The barium could be injected as far as the anatomic site of the Meckel's diverticulum, indicated by the arrow in the midabdomen.

d. Postevacuation study. This film demonstrates how the intussusception reduces itself spontaneously. The cecum and appendix are now visualized, as well as a portion of the distal small bowel. A small defect still persists in the region of the umbilicus, and this suggested a Meckel's diverticulum as the etiologic factor. The small bowel obstruction is now relieved, as evidenced by absence of the distended small bowel loops.

improved but did not relax and quiet down as much as was expected, so immediate abdominal exploration was decided on. At operation (by J.W.) through a right rectus incision twelve hours after onset of symptoms, some free pus was found in the abdomen, and there was considerable dilation of the small bowel proximal to a Meckel's diverticulum which had perforated near its base and the edematous mesentery of which partially obstructed the ileum. This ileal mesentery was quite edematous and acutely inflamed in the region of the diverticulum. The distal ileum was collapsed, but its serosa was congested proximally from the ileocecal valve for most of the distance to the rather fixed level of the Meckel's diverticulum. There was no residual intussusception. As the condition of the abdomen indicated a peritonitis had been present for several hours, some ileal contents were still escaping from the perforation, and the ileum at the level of the diverticulum was fixed by the inflammatory mesentery, it was assumed that the terminal ileum, distal to the diverticulum, had intussuscepted into the cecum and ascending colon either because of or associated with the perforation. However, the diverticulum itself had not been inverted into the ileum or otherwise been any part of the intussusception. Clamps were placed across the ileum an inch above and an inch below the diverticulum, and the diseased bowel and mesentery excised. Open end to end anastomosis of the ileum was done with two rows of catgut. The appendix was not seen nor searched for. The abdomen was closed with catgut, cotton, and silk. A blood transfusion was given during the operative procedure, and the child was returned to his room in satisfactory condition. With intensive postoperative treatment the child recovered nicely, and roentgen examination of the colon and terminal ileum six months later was normal.

The pathologist reported that the diverticulum had ectopic gastric mucosa at its base, with a chronic peptic ulcer there, and recent perforation (fig. 2); stained smear of the abdominal fluid was negative for organisms, and the culture was negative. In this unusual case of Meckel's diverticulum there were three complications, ectopic gastric mucosa with peptic ulcer formation, perforation, and intussusception. The preoperative hypochromic anemia in the child was possibly due to chronic blood loss from the ulcer and to deficient diet.

COMMENT

These cases remind us that search for Meckel's diverticulum at the time of appendectomy in children is advisable. The last case is unusual, but reminds us that intussusception in children may be associated with complications of a Meckel's diverticulum which can be more serious than the intussusception itself. Perforation of the peptic ulcer with resultant peritonitis is an indication for surgical treatment whereas intussusception in some cases could be reduced by proper use of barium enema. Intussusception of a Meckel's diverticulum has been reported, but intussusception distal to a perforated Meckel's diverticulum without the diverticulum being included must be quite rare.

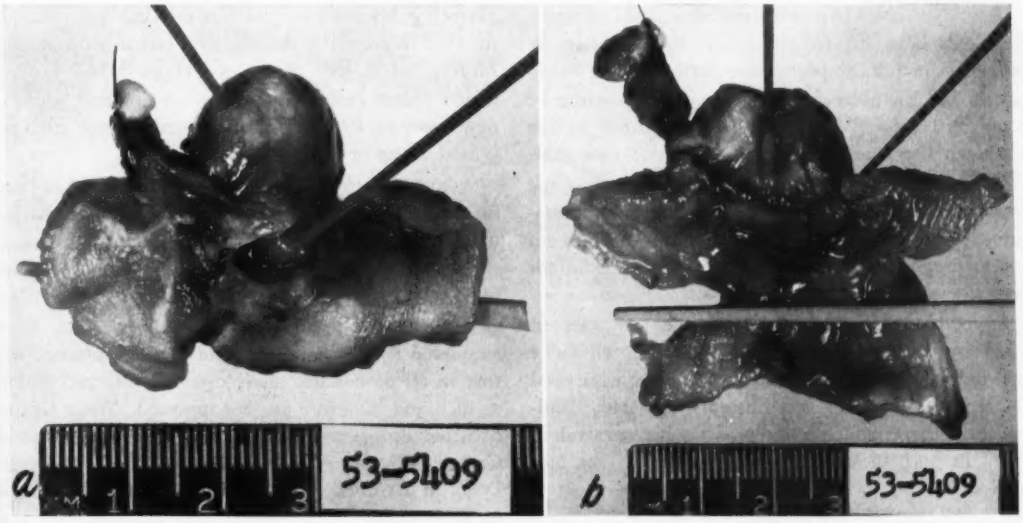

FIG. 2. Gross specimen.

a. The horizontal probe is inserted in the lumen of the resected small bowel. The oblique probe points to the perforated ulcer area; the third probe, to the Meckel's diverticulum.

b. The specimen is in the same position as in *a*, but has been opened along the longitudinal axis of the small bowel and the axis of the Meckel's diverticulum. The thick mucosal folds of the diverticulum is demonstrated and has the appearance of gastric mucosa.

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MONOAMNIOTIC TWIN PREGNANCY

Review of American Literature with Case Report

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ALL reports on monoamniotic twin pregnancy have stressed the rarity of this condition. Quigley,[17] in his comprehensive review of the literature in 1935, emphasized this fact. At that time he found that only 8 cases had been reported in the American literature, to which he added 1 new case.

McCormick[13] has been credited with reporting the first case of double survival in the American literature. However, review of his case fails to confirm a twin pregnancy, but rather suggests a single infant with a true knot in the cord.

Atwood[1] now is credited with the first case of double survival in the American literature, which he reported in 1932. The second case of double survival was reported by Parks and Epstein[15] in 1940. Coulton and others[5] added 2 cases of double survival in 1947. In both of these cases there was neither tangling nor knotting of the cords. King and others[11] in 1952 reported 4 double live births with double survival of 2 sets of twins. Hagood and Stokes[8] added 1 new case and Charlton and others[4] added 2 new cases in 1953; Conybeare[6] and Hanes[9] each reported a case of double survival in 1954.

TABLE 1.—*American Cases of Monoamniotic Twins Carried to Viability.*

Year	Author	No. of Cases	Single Live Births	Double Live Births	Double Survival	Total Live Children
1932	Atwood	1	0	1	1	2
1935	Quigley	9	0	1	0	0
1935	Rucker	1	1	0	0	1
1935	Litt and Strauss	1	0	0	0	0
1940	Parks and Epstein	1	0	1	1	2
1942	Jones	1	0	0	0	0
1945	Coulton, Hertig, and Long	2	0	2	2	4
1947	Boyle and Richter	1	0	0	0	0
1947	Woodburn	1	0	0	0	0
1951	Mendel	1	1	0	0	1
1952	King, Herring, Witt, and Blood	5	1	4	2	5
1953	Hagood and Stokes	1	0	1	1	2
1953	Charlton, Winston and Chomko	2	0	2	2	4
1954	Hanes	1	0	1	1	2
1954	Conybeare	1	0	1	1	2
1954	Crouch	1	0	0	0	0
1954	Swain	1	0	0	0	0
1954	Mendel	1	0	1	1	2
	Totals	32	3	15	12	27

A summary of all cases reported in the American literature of monoamniotic twin pregnancies carried to viability is shown in table 1.

The incidence of monoamniotic twins has been reported at 1 in 132 sets of twins, or 1 monoamniotic twin pregnancy to about 16,000 deliveries (Ahlfred, as quoted by Bela[2]). King and others[11] pointed out that in all probability many cases are not recognized as such and therefore are not reported. Their 5 cases occurred in a period of eighteen months. Potter and Crunden[16] reviewed 332 twin pregnancies at Chicago Lying-In Hospital from 1931 to 1941 and reported no such twins.

I report another case of full term monoamniotic twin pregnancy with survival of both twins. This case plus the 1 reported in 1951 with survival of 1 twin[14] makes 2 cases on this subject in one private service in a period of eight and one-half years. During this time there have been 11 twins among 1,203 deliveries.

ETIOLOGY

Quigley quoted two theories as to the origin of monoamniotic twin pregnancy: "The first, or primitive duality, in which there are originally two amnions, the partition between the two sacs is broken down early in fetal life; the second, that of primitive unity, in which case there is one amnion from the beginning. Two blastodermic vesicles meet and join and are enveloped by one amnion."[17]

SIGNIFICANCE

The chief clinical significance in all cases concerns the fetuses only. The delivery is not more difficult than in any other case of twin labor. There is danger of death of one or both of the fetuses from twisting or knotting of the cords, which is very common.

There is no more risk to the mother than in any other case of twin pregnancy. No case of collision of twins has been reported.

For the fetus, however, monoamniotic twinning is of serious portent. Only 42.1 per cent of the babies survived in the cases reported in the reviewed American literature.

DIAGNOSIS AND TREATMENT

There is no method by which this condition can be diagnosed prior to delivery. It is diagnosed after the first twin has been delivered by the absence of the second bag of water. The delivery of the second twin should be immediate to avoid, if possible, cord accidents.

CASE REPORT

Mrs. E. S., a 32 year old gravida 2 para 1, was first seen on June 25, 1953, and had her last menses on April 16. Her prenatal course was uneventful with no elevation of blood pressure or albuminuria. Physical examination was completely normal. The diagnosis of twin pregnancy was made on November 17. Her estimated date of confinement was calculated as January 23, 1954.

She went into spontaneous labor on January 7 at 6 a. m. Her membranes ruptured spontaneously at 10 a. m. After a normal labor, the first twin, a viable male, was delivered by low forceps and central episiotomy from a left occiput anterior position at 11 a. m. After the delivery of the first baby, examination failed to reveal any membranes around the second twin. This infant was in a transverse lie, so an internal podalic version was performed and a viable male infant was delivered at 11:52 a. m.

The placenta was delivered intact with mild fundal pressure at 11:55 a. m. Bleeding was minimal and 1 cc. of Methergine was given intravenously.

Twin A weighed 2,863 Gm. (6 pounds, 5 ounces) and twin B weighed 2,750 Gm. (6 pounds, 1 ounce).

The placenta was examined carefully. There was no evidence of any partition between the two cords. The placenta weighed 1,130 Gm. and measured 21 by 18 by 3.5 cm. The cords were of equal length, 60 cm., and both had a lateral insertion on opposite sides of the placenta. The cords were neither knotted nor twisted.

The patient's post partal course was uneventful. Her post partal examination was completely normal. Both twins have done well to the present time.

SUMMARY

Monoamniotic twin pregnancy is not as rare as the number of reports in the literature would indicate.

The prognosis for the fetuses is unfavorable as shown by 27 surviving babies in 32 cases in the reviewed American literature.

The bad prognosis is due almost entirely to knotting and twisting of the umbilical cords. In this case, there was no knotting or twisting present.

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3702 Worth.

SCURVY MORE COMMON THAN REALIZED

The prevalence of scurvy in the general population was reported on by Dr. George E. Morris, Boston. He found that 5.45 per cent (or 15 of his new patients) of the total patients seen had frank or latent scurvy. These patients "believed that they were following a balanced diet," the clinical professor of dermatology at Tufts Medical College reported in the August issue of the *American Practitioner and Digest of Treatment*.

Dr. Morris discovered frank clinical scurvy in 8 of the patients and suboptimal vitamin C levels in all 15 patients. All responded well to large doses of vitamin C in the form of citrus juices and tablets.

Do back issues of technical journals clutter your office and home? Send them to the Memorial Library of the Texas Medical Association.

NEWS

COMING MEETINGS AND CLINICS

Texas Medical Association, Fort Worth, April 24-27, 1955. Dr. F. J. L. Blasingame, Pres.; Mr. C. Lincoln Williston, 1801 North Lamar Blvd., Austin, Executive Secy.

American Medical Association, Atlantic City, N. J., June 6-10, 1955. Dr. Walter B. Martin, Norfolk, Va., Pres.; Dr. George F. Lull, 535 North Dearborn St., Chicago 10, Secy.

NATIONAL AND REGIONAL

American Academy of Allergy, New York, Feb. 7-9, 1955. Dr. John M. Sheldon, Ann Arbor, Pres.; Dr. Frances C. Lowell, 65 E. Newton St., Boston, Secy.

American Academy of Dermatology and Syphilology. Dr. Fred D. Weidman, Philadelphia, Pres.; Dr. John E. Rauschkolb, P. O. Box 6565, Cleveland 1, Secy.

American Academy of General Practice, Los Angeles, March 28-31, 1955. Dr. W. B. Hildebrand, Menasha, Wis., Pres.; Mr. Mac F. Cahal, 406 W. 34th St., Kansas City 2, Executive Secy.

American Academy of Obstetrics and Gynecology, Chicago, Dec. 14, 1955. Dr. Bayard Carter, Durham, N. C., Pres.; Dr. C. Paul Hodgkinson, 116 S. Michigan Blvd., Chicago 3, Secy.

American Academy of Ophthalmology and Otolaryngology, Chicago, Oct. 9-14, 1955. Dr. Walter H. Theobald, Chicago, Pres.; Dr. W. L. Benedict, 100 First Ave. Bldg., Rochester, Minn., Secy.

American Academy of Pediatrics, Chicago, Oct. 3-6, 1955. Dr. A. Crawford Bost, San Francisco, Calif., Pres.; Dr. E. H. Christopherson, 610 Church St., Evanston, Ill., Secy.

American Association for Thoracic Surgery, Atlantic City, N. J., April 24-26, 1955. Dr. Edward S. Welles, Saranac Lake, N. Y., Pres.; Dr. Paul C. Samson, 3959 Happy Valley Rd., Lafayette, Calif., Secy.

American Association of Genito-Urinary Surgeons, Monterey, Calif., May 22-25, 1955. Dr. Fletcher H. Colby, Boston, Pres.; Dr. John A. Taylor, 2 E. 45th St., New York 22, Secy.

American Association of Obstetricians, Gynecologists and Abdominal Surgeons, Hot Springs, Va., Sept. 8-10, 1955. Dr. Thaddeus L. Montgomery, Philadelphia, Pres.; Dr. F. R. Lock, Bowman Gray School, Winston-Salem, N. C., Secy.

American Cancer Society. Dr. Guy Aud, Louisville, Ky., Pres.; Mr. M. R. Runyon, 47 Beaver St., New York, Executive Vice-Pres.

American College of Allergists, Chicago, April 25-30, 1955. Dr. Homer Prince, Houston, Pres.; Dr. Fred W. Wittich, 401 La Salle Medical Bldg., Minneapolis 2, Secy.

American College of Chest Physicians, Atlantic City, N. J., June 2-5, 1955. Dr. William A. Hudson, Detroit, Pres.; Mr. Murray Kornfeld, 112 E. Chestnut St., Chicago 11, Executive Secy.

American College of Physicians, Philadelphia, April 25-29, 1955. Dr. C. C. Sturgis, Ann Arbor, Mich., Pres.; Mr. E. R. Loveland. 4200 Pine St., Philadelphia 4, Secy.

American College of Radiology, Chicago, Feb. 11-12, 1955. Dr. Howard P. Doub, Detroit, Pres.; Mr. W. C. Stronach, 20 N. Wacker Drive, Chicago 6, Executive Secy.

American College of Surgeons, Chicago, Oct. 31-Nov. 4, 1955. Dr. Frank Glenn, New York City, Pres.; Dr. Michael L. Mason, 40 E. Erie St., Chicago 11, Secy.

American Congress on Obstetrics and Gynecology. Dr. R. Gordon Douglas, 116 S. Michigan Ave., Chicago 3, Chairman.

American Congress of Physical Medicine and Rehabilitation, Detroit, Aug. 29-Sept. 2, 1955. Dr. William D. Paul, Iowa City, Pres.; Dr. Frances Baker, 1 Tilton Ave., San Mateo, Calif., Secy.

American Dermatological Association, Belleair, Fla., April 17-21, 1955. Dr. Richard S. Weiss, St. Louis, Pres.; Dr. J. Lamar Callaway, Duke Hospital, Durham, N. C., Secy.

American Gastro-Enterological Association, Atlantic City, N. J., June 4-5, 1955. Dr. Dwight L. Wilbur, San Francisco, Pres.; Dr. H. Marvin Pollard, University Hosp., Ann Arbor, Mich., Secy.

American Gynecological Society, Quebec, Canada, May 23-25, 1955. Dr. Philip F. Williams, Philadelphia, Pres.; Dr. John I. Brewer, 104 S. Michigan Ave., Chicago, Secy.

American Heart Association, New Orleans, Oct. 26-30, 1955. Dr. E. Cowles Andrus, Baltimore, Pres.; Mr. Irving Hexter, 44 E. 23rd St., New York 10, Secy.

American Hospital Association, Atlantic City, N. J., Sept. 19-22, 1955. Dr. Frank R. Bradley, St. Louis, Pres.; Dr. Edwin L. Crosby, 18 E. Division St., Chicago, Executive Director.

American Laryngological, Rhinological, and Otological Society, Hollywood, Fla., March 15-17, 1955. Dr. Kenneth M. Day, Pittsburgh, Pres.; Dr. C. S. Nash, 277 Alexander St., Rochester 7, N. Y., Secy.

American Neurological Association, Chicago, June 13-15, 1955. Dr. Percival Bailey, Chicago, Pres.; Dr. H. Houston Merritt, 710 W. 168th St., New York 32, Secy.

American Ophthalmological Society, W. Sulphur Springs, W. Va., June 2-4, 1955. Dr. Everett L. Goar, Houston, Tex., Pres.; Dr. M. C. Wheeler, 30 W. 59th St., New York 19, Secy.

American Orthopedic Association, W. Sulphur Springs, W. Va., June 19-22, 1955. Dr. J. Warren White, Honolulu, Hawaii, Pres.; Dr. George O. Eaton, 4 E. Madison St., Baltimore 2, Secy.

American Pediatric Society, Quebec, Canada, June 13-17, 1955. Dr. Alfred H. Washburn, Denver, Pres.; Dr. A. C. McGuinness, 237 Medical Laboratory, University of Pennsylvania, Philadelphia 46, Secy.

American Proctologic Society, New York, June 1-4, 1955. Dr. A. W. Martin Marino, Brooklyn, N. Y., Pres.; Dr. Karl Zimmerman, 3500 Fifth Ave., Pittsburgh 13, Secy.

American Psychiatric Association, Atlantic City, N. J., May 9-13, 1955. Dr. Alfred P. Noyes, Norristown, Pa., Pres.; Dr. William Malamud, 80 E. Concord St., Boston 18, Secy.

American Public Health Association, Kansas City, Mo., Nov. 14-18, 1955. Dr. Herman E. Hilleboe, Albany, N. Y., Pres.; Dr. R. M. Atwater, 1790 Broadway, New York 19, Executive Secy.

American Society of Anesthesiologists, Boston, Oct. 29-Nov. 3, 1955. Dr. B. B. Sankey, Cleveland, Ohio, Pres.; Dr. J. E. Remlinger, Jr., 188 W. Randolph St., Chicago, Secy.

American Society of Clinical Pathologists. Dr. John R. Schenken, Omaha, Pres.; Dr. Clyde G. Culbertson, 1040 W. Michigan St., Indianapolis 6, Secy.

American Surgical Association, Philadelphia, April 27-29, 1955. Dr. John H. Gibbon, Jr., Pres.; Dr. R. Kennedy Gilchrist, 59 East Madison, Chicago 3, Secy.

American Urological Association, Los Angeles, May 16-19, 1955. Dr. W. Joseph McMartin, Omaha, Neb., Pres.; Dr. C. H. deT. Shivers, 121 S. Illinois Ave., Atlantic City, N. J., Secy.

Association of American Physicians and Surgeons, Pittsburgh, Pa., April 14-16, 1955. Dr. Thomas G. Goldsmith, Greenville, S. C., Pres.; Mr. Harry E. Northam, 185 N. Wabash Ave., Chicago 1, Executive Secy.

International College of Surgeons, U. S. Chapter, Chicago, Sept. 7-10, 1955. Dr. William R. Lovelace, Albuquerque, N. M., Pres.; Dr. Karl Meyer, 1516 Lake Shore Drive, Chicago, Secy.

National Tuberculosis Association, Milwaukee, May 23-27, 1955. Dr. John H. Skavlem, Cincinnati, Pres.; Mrs. Morrell DeReign, 1790 Broadway, New York 19, Secy.

Radiological Society of North America, Chicago, Dec. 11-16, 1955. Dr. Tom B. Bond, Fort Worth, Pres.; Dr. D. S. Childs, 713 E. Genesee, Syracuse 2, N. Y., Secy.

Southern Medical Association, Houston, Texas, Nov. 14-17, 1955. Dr. Robert L. Sanders, Memphis, Tenn., Pres.; Mr. V. O. Foster, 1020 Empire Bldg., Birmingham 3, Ala., Secy.

Southern Psychiatric Association. Dr. John D. Trawick, Louisville, Ky., Pres.; Dr. Joseph L. Knapp, 210 N. Westmoreland, Dallas, Secy.

Southern Surgical Association, Hot Springs, Va., Dec. 6-8, 1955. Dr. Carrington Williams, Richmond, Va., Pres.; Dr. George Finney, 2947 St. Paul St., Baltimore, Secy.

Southwest Allergy Forum. Dr. Henry D. Ogden, New Orleans, Pres.; Dr. Stanley Cohen, 1441 Delachaise St., New Orleans, Secy.

Southwest Regional Cancer Conference, Fort Worth. Dr. John L. Wallace, Box 1719, Fort Worth, Chm.

Southwestern Medical Association, Phoenix, Ariz., November, 1955. Dr. Joseph Bank, Phoenix, Pres.; Dr. Celso C. Stapp, 800 Montana, El Paso, Secy.

Southwestern Surgical Congress, Kansas City, Mo., Sept. 12-14, 1955. Dr. Lawrence P. Engel, Kansas City, Mo., Pres.; Dr. C. M. O'Leary, 207 Plaza Court Bldg., Oklahoma City, Secy.

Tri-State Medical Society, Texarkana, September, 1955. Dr. William B. Harrell, Texarkana, Pres.; Dr. Karlton Kemp, 408 Hazel, Texarkana, Ark., Secy.

United States-Mexico Border Public Health Association, Mexico, D. F., May 6-9, 1955. Mr. Richard F. Poston, San Francisco, Pres.; Dr. Sidney B. Clark, 314 U. S. Court House, El Paso, Secy.

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Texas Academy of Internal Medicine. Dr. Martin S. Buehler, Dallas, Pres.; Dr. George M. Jones, 1314 Medical Arts Bldg., Dallas, Secy. Meetings restricted to members.

Texas Air-Medics Association, Fort Worth, April 24-25, 1955. Dr. J. S. Minnett, Dallas, Pres.; Dr. C. F. Miller, P. O. Box 1338, Waco, Secy.

Texas Association of Blood Banks, Houston, 1955. Dr. Jarrett E. Williams, Abilene, Pres.; Miss Marjorie Saunders, 3500 Gaston Ave., Dallas, Secy.

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Texas Chapter, American College of Chest Physicians, Fort Worth, April 24, 1955. Dr. Howard E. Smith, Austin, Pres.; Dr. John Wiggins, 1707 Medical Arts Bldg., Fort Worth, Secy.

Texas Club of Internists. Victor E. Schulze, San Angelo, Pres.; Dr. Charles Darnall, Capital National Bank Bldg., Austin, Secy.

Texas Dermatological Society, Fort Worth, April 24, 1955. Dr. Paul H. Power, Waco, Pres.; Dr. Thomas L. Shields, 1216 Pennsylvania Ave., Fort Worth, Secy.

Texas Diabetes Association, Fort Worth, April 24, 1955. Dr. George M. Jones, Dallas, Pres.; Dr. Hugo Engelhardt, P. O. Box 2180, Houston, Secy

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Texas Geriatric Society. Dr. Henry H. Niehuss, Longview, Pres.; Dr. Frank V. Mondrik, 214 Bramlette Bldg., Longview, Secy.

Texas Heart Association, Fort Worth, April 25, 1955. Dr. George R. Herrmann. Galveston, Pres.; Mr. Edgar M. Brown, 404 Jesse H. Jones Library Bldg., Texas Medical Center, Houston 25, Executive Director.

Texas Hospital Association, Houston, April 12-14, 1955. Mr. W. U. Paul, El Paso, Pres.; Mrs. Ruth Barnhart, 2210 Main St., Dallas, Secy.

Texas Neuropsychiatric Association, Fort Worth, April 24, 1955. Dr. Edgar S. Ezell, Fort Worth, Pres.; Dr. Bruce H. Beard, 1519 Pennsylvania, Fort Worth, Secy.

Texas Orthopedic Association, Fort Worth, April 25, 1955. Dr. Brandon Carrell, Dallas, Pres.; Dr. Margaret Watkins, 3629 Fairmount St., Dallas, Secy.

Texas Pediatric Society, Galveston, October, 1955. Dr. M. C. Carlisle, Waco, Pres.; Dr. James N. Walker, 3616 Tulsa Way, Fort Worth, Secy.

Texas Proctologic Society, Dallas, Feb. 26, 1955. Dr. Jack Kerr, Dallas, Pres.; Dr. John McGivney, 2202 Avenue L, Galveston, Secy.

Texas Public Health Association, Galveston, Feb. 13-16, 1955. Mr. Ed Riedel, Austin, Pres.; Mr. H. E. Drumwright, City Health Department, Dallas, Executive Secy.

Texas Radiological Society. Dr. E. F. Lyon, Jr., San Antonio, Pres.; Dr. R. P. O'Bannon, 650 Fifth Ave., Fort Worth, Secy.

Texas Railway and Traumatic Surgical Association, Fort Worth, April 25, 1955. Dr. Raleigh White, Temple, Pres.; Dr. W. D. Marrs, 306 Broadway, Fort Worth, Secy.

Texas Rheumatism Association. Dr. Charles H. Cornwell, Marlin, Pres.; Dr. Warren W. Moorman, 901 W. Leuda, Fort Worth, Secy.

Texas Society for Mental Health, Mineral Wells, March 2-4, 1955. Dr. Charles N. Burrows, San Antonio, Pres.; Mrs. Elizabeth F. Gardner, 2504 Jarratt Ave., Austin 3, Executive Secy.

Texas Society of Anesthesiologists, Fort Worth, April 24, 1955. Dr. Frank O. Barrett, El Paso, Pres.; Dr. Milton M. Rosenzweig, 200 Wildwood Dr. E., San Antonio, Secy.

Texas Society of Gastroenterologists and Proctologists, Fort Worth, April 25, 1955. Dr. Charles Hardwicke, Austin, Pres.; Dr. W. T. Arnold, 1402 Hermann Prof. Bldg., Houston, Secy.

Texas Society of Ophthalmology and Otolaryngology. Dr. John L. Matthews, San Antonio, Pres.; Dr. Gatlin Mitchell, 1604 Medical Arts Bldg., Fort Worth, Secy.

Texas Society of Pathologists, Fort Worth, April 26, 1955. Dr. C. B. Sanders, Houston, Pres.; Dr. M. H. Grossman, St. Paul Hospital, Dallas, Secy.

Texas Surgical Society. Dr. Dudley Jackson, Sr., San Antonio, Pres.; Dr. Albert W. Hartman, 414 Navarro St., San Antonio 5, Secy.

Texas Tuberculosis Association, Galveston, April 15-16, 1955. Mrs. Joella Terrill Butler, Wichita Falls, Pres.; Miss Pansy Nichols, 2406 Manor Rd., Austin, Executive Secy.

Texas Urological Society, Corpus Christi, Feb. 27-28, 1955. Dr. S. J. R. Murchison, Fort Worth, Pres.; Dr. A. J. Ashmore, 255 Medical Dental Bldg., Corpus Christi, Secy.

West Texas Surgical Society. Dr. J. A. Shapira, Midland, Pres.; Dr. Milton J. Loring, 304 North N St., Midland, Secy.

DISTRICT

First District Society, Pecos, Feb. 11, 1955. Dr. John W. O'Donnell, Alpine, Pres.; Dr. W. G. Morrow, Jr., First National Bldg., El Paso, Secy.

Second District Society, Midland, April 21, 1955. Dr. John R. Mast, Midland, Pres.; Dr. M. J. Loring, 304 North N St., Midland, Secy.

Third District Society, Borger, April, 1955. Dr. M. C. Overton, Jr., Pampa, Pres.; Dr. William Klingensmith, 215 Fisk Bldg., Amarillo, Secy.

Fourth District Society, Brownwood, October, 1955. Dr. James N. White, San Angelo, Pres.; Dr. Joe B. Stephens, Bangs, Secy.

Fifth and Sixth Districts Society, Corpus Christi, July 7-9, 1955. Dr. John J. Sloan, Corpus Christi, Pres.; Dr. E. Jackson Giles, Medical Center, Suite 42, Corpus Christi, Secy.

Seventh District Society, Austin, Feb. 17, 1955. Dr. William McLean, Austin, Pres.; Dr. John Rainey, 1709 San Antonio, Austin, Secy.

Eighth District Society, Galveston, 1955. Dr. George E. Glover, Jr., Victoria, Pres.; Dr. York Lancaster, Port Lavaca, Secy.

Ninth District Society, Houston, March 17, 1955. Dr. Thomas H. Giddings, Brenham, Pres.; Dr. Lyman C. Blair, 1212 Rothwell, Houston, Secy.

Tenth District Medical Society. Dr. J. C. Klein, Lufkin, Pres.; Dr. Rider Stockdale, Jasper, Secy.

Eleventh District Society, Dr. Porter Bailes, Tyler, Pres.; Dr. Hugh F. Rives, Jacksonville, Secy.

Twelfth District Society. Dr. Neil Buie, Marlin, Pres.; Dr. Paul H. Mitchell, Corsicana, Secy.

Thirteenth District Society, Abilene, March 2, 1955. Dr. Mal Rumph, Fort Worth, Pres.; Dr. Robert D. Moreton, 815 Medical Arts Bldg., Fort Worth, Secy.

Fourteenth District Society. Dr. J. David Thomas, Denton, Pres.; Dr. L. W. Johnston, 502 W. College St., Terrell, Secy.

Fifteenth District Society, Mount Pleasant, 1955. Dr. R. L. Johnson, Mount Pleasant, Pres.; Dr. R. L. Hardman, Mount Pleasant, Secy.

CLINICS

Dallas Southern Clinical Society, Dallas, March 14-17, 1955. Dr. Lawrence B. Sheldon, Dallas, Pres.; Miss Helga Boyd, Medical Arts Bldg., Dallas 1, Executive Secy.

Central Texas Spring Clinic, Waco, March 2, 1955. Dr. Ross Shipp, Waco, Pres.; Dr. Milton Spark, 121 Dallas St., Waco, Secy.

International Medical Assembly of Southwest Texas, San Antonio. Dr. John M. Smith, Jr., 205 Camden St., San Antonio, Secy.

New Orleans Graduate Medical Assembly, New Orleans, March 7-10, 1955. Dr. Maurice E. St. Martin, Room 103, 1430 Tulane Ave., New Orleans 12, Secy.

North Texas-Southern Oklahoma Fall Clinical Conference. Dr. L. N. Simmons, 1518 Tenth St., Wichita Falls, Chairman.

Oklahoma City Clinical Society Conference, Oklahoma City. Miss Alma F. O'Donnell, 512 Medical Arts Bldg., Oklahoma City 2, Executive Secy.

Postgraduate Medical Assembly of South Texas. Dr. Edward T. Smith, 907 Hermann Professional Bldg., Houston, Secy.

State Tumor Conference, Wichita Falls, April 6, 1955. Dr. Bailey R. Collins, 925½ Scott Street, Wichita Falls, Director.

BOARD EXAMINATIONS

Texas State Board of Examiners in Basic Sciences, Galveston, Houston, and Dallas, April 15-16, 1955. Mrs. Betty Ratcliff, 407 Perry-Brooks Bldg., Austin, Chief Clerk.

Texas State Board of Medical Examiners, Fort Worth, June 20-22, 1955. Dr. M. H. Crabb, 1714 Medical Arts Bldg., Fort Worth, Secy.

UNIVERSITY OF TEXAS MEDICAL BRANCH

The University of Texas Medical Branch, Galveston, in cooperation with the Texas Academy of Science, is presenting a weekly series of television broadcasts, "Man and Medicine," over a Houston station. Given at Sunday noon, the program will run sixteen weeks.

Dr. Augustine Palacios and *Molly R. Harrower, Ph. D.,* reported on the general purpose and program of the psychological testing study of entering medical students at the University of Texas Medical Branch at the Pan-American International Psychology Congress held at the University of Mexico, Mexico City, recently. This program is sponsored at the Medical Branch by the Josiah Macy Foundation of New York City.

Dr. Nicola Abbagnano, professor of philosophy at the University of Turin, was a guest at the Medical Branch during January. He gave a series of lecture and seminar discussions on "Contemporary Philosophy in Relation to Medicine and Science."

Dr. Raymond Lewthwaite, director of Colonial Medical Research, London, spoke at the anatomy seminar on January 24; *Dr. Harry Wilkins,* professor of neurosurgery at the University of Oklahoma School of Medicine, gave the annual James Greenwood Lecture on January 17; his topic was "Anatomical and Clinical Aspects of Headache."

PERSONALS

Dr. M. H. Crabb, Fort Worth, was installed as president of the Federation of State Medical Boards of the United States at the fifty-first annual congress on Medical Education and Licensure in Chicago, February 5-8.

Dr. Homer Prince, Houston, president of the American College of Allergists, spoke at the February meeting of the American Academy of Allergy. *Dr. Ralph Bowen,* Houston, was also on the program during the three-day session, February 7-9.

Dr. Tom Bond, Fort Worth, was installed as president of the Radiological Society of North America on December 9.

Dr. William A. Spencer, Houston, has been named as one of America's ten "outstanding young men of 1954" by the United States Junior Chamber of Commerce for his exceptional achievement in research and treatment of poliomyelitis.

Dr. G. W. N. Eggers, Galveston, spoke at the American Academy of Orthopedic Surgeons meeting held early in February in Los Angeles.

Dr. Robert G. Baker, Fort Worth, was recently presented the gold headed cane award by the Tarrant County Medical Society. The society awards this to the member who has brought outstanding credit to the profession during the year.

Friends of *Dr. W. E. Payne,* Slaton, held an open house for him at Slaton on December 31 honoring his thirty years' service in that community as a physician, surgeon, and civic worker.

Dr. Allen M. Fain, Duncanville, was elected president of the newly-organized Duncanville Chamber of Commerce.

Dr. Edgar S. Ezell, Fort Worth, spoke on mental health in the home at the November 30 meeting of the Decatur Woman's Club.

Members of the *Willard R. Cooke Club,* which was organized in recognition of Dr. Cooke's thirty years of chairmanship of the Department of Obstetrics and Gynecology at the University of Texas Medical Branch, elected *Dr. Herman L. Gardner,* Houston, president, and *Dr. Hiram P. Arnold,* Houston, secretary, at a November 29 meeting in Galveston.

New parents in Dallas are *Dr. and Mrs. J. R. Jordan,* a boy; *Dr. and Mrs. Eldon Sieber,* and *Dr. and Mrs. Ben Wilson,* girls.

New parents of boys in Fort Worth are *Dr. and Mrs. John L. Wallace,* born December 13; *Dr. and Mrs. Ross Whittenburg,* born in November; *Dr. and Mrs. W. Burgess Sealy,* born December 5; and *Dr. and Mrs. Otto Grunow,* born December 26.

Dr. and Mrs. John Perry, Wichita Falls, are new parents of a boy; and *Dr. and Mrs. Jerry Hathorn,* Wichita Falls, are new parents of a girl.

Dr. and Mrs. J. L. Coleman, Midland, are parents of a girl born in December.

NEW ORLEANS MEDICAL ASSEMBLY

The eighteenth annual meeting of the New Orleans Graduate Medical Assembly will be held March 7-10, 1955, with headquarters at the Municipal Auditorium.

Guest speakers at the session will be Drs. Donald H. Stubbs, Washington, D. C.; Donald W. Seldin, Dallas; Marcus R. Caro, Charles B. Puestow, and Joseph B. Kirsner, Chicago; Willis E. Brown, Little Rock, Ark.; Tinsley R. Harrison, Birmingham, Ala.; William A. Sodeman, Columbia, Mo.; Leonard T. Furlow, St. Louis; Thaddeus L. Montgomery, Philadelphia; F. Bruce Fralick, Ann Arbor, Mich.; George J. Garceau, Indianapolis; Jerome A. Hilger, St. Paul; William Boyd, Toronto, Canada; Louis K. Diamond, Boston; H. Dabney Kerr, Iowa City; B. Marden Black, Rochester, Minn., and Hugh J. Jewett, Baltimore, Md.

Following the assembly, a party of doctors and their families will fly from New York on March 12 for Europe. The trip will include visits to France, Italy, Germany, Denmark, Sweden, and England; arrangements have been made for medical programs in these countries.

Additional information about the meeting and the postclinical tour may be obtained from the office of the Assembly, Room 103, 1430 Tulane Avenue, New Orleans 12.

Wichita Falls State Tumor Conference

The fourth annual State Tumor Conference will be held on April 6 in Wichita Falls in the main auditorium of Midwestern University. This conference is sponsored by the Wichita County Medical Society Tumor Clinic, the Texas State Department of Health, and the American Cancer Society. There is no registration fee, and it is approved for formal postgraduate training.

The program follows:

Address of Welcome—Dr. Roger W. Manar, Wichita Falls, President, Wichita County Medical Society.
Early Detection of Cancer—Dr. Mandred W. Comfort, Mayo Clinic, Rochester, Minn.
Carcinoma of the Colon and Rectum—Dr. C. W. Mayo, Mayo Clinic, Rochester, Minn.
The Scope and Effectiveness of Modern Radio Therapy for Cancer—Dr. Manuel Garcia, New Orleans, Tulane University School of Medicine.
The Early Diagnosis of Cancer and the Survival Rates—Dr. Comfort.
The Treatment of Head and Neck Cancer by Irradiation—Dr. Garcia.
The End Results of Treatment of Cancer of the Colon and Rectum—Dr. Mayo.

Dr. B. R. Collins, Wichita Falls, will preside over the morning session, scheduled to begin at 9 a. m. Luncheon will be served at the Midwestern University Cafeteria at 12:30, and Dr. David H. Allen, Wichita Falls, will preside over the afternoon session, which is scheduled to begin at 1:30 p. m. The program will be ended with a question and answer period.

Texas Association of Obstetricians and Gynecologists

The twenty-sixth annual meeting of the Texas Association of Obstetricians and Gynecologists is being held at the Rice Hotel in Houston on February 26. Dr. Richard Wesley TeLinde, professor in gynecology at Johns Hopkins University, Baltimore, and chief gynecologist at the Johns Hopkins Hospital, is the guest speaker. The program, beginning at 9 a. m., follows:

The Late Results of Pelvic Surgery—Dr. Eugene T. Ellison, Texarkana.
Carcinoma of the Cervix, Present Day Aspects of Diagnosis and Treatment—Dr. TeLinde.
Haemophilus Vaginalis Vaginitis; a Newly Defined Specific Infection Previously Classified "Non-Specific" Vaginitis—Dr. Herman L. Gardner, Houston.
Cord Casualties; a Resume with Presentation of Cases—Dr. Wayne F. Baden, Raymondville.
Threatened Abortion—Dr. Charles Powell, Galveston.
Agenesis of the Mullerian Ducts with Absence of Vagina and Uterus—Dr. Roy L. Grogan, Fort Worth.
Urinary Incontinence in the Female—Dr. TeLinde.
Experience in Management of Occipitoposterior Position—Dr. Douglas M. Haynes, Dallas.
Diagnosis and Treatment of Endometrial Cancer—Dr. John A. Wall, Houston.

Participating on the program as discussers of papers are Dr. Willard R. Cooke, Galveston, Dr. Joseph E. Kanatser, Wichita Falls, Dr. Truman G. Blocker, Galveston, and Dr. Garth Jarvis, Galveston.

A luncheon is being served at noon, and a business meeting will follow the afternoon program. A cocktail party followed by a dinner and dancing is being held that evening.

Peacetime Veteran Benefits

Persons entering the armed forces for the first time on and after February 1 will be peacetime veterans when they leave service and, as such, will be entitled only to peacetime benefits, the Veterans Administration has announced.

Peacetime veterans, under present laws, will not be eligible for any benefits provided by the Korean GI Bill, nor for any wartime service benefits payable to veterans of the Korean conflict period.

However, peacetime veterans may be entitled, under certain conditions, to medical and domiciliary care, disability compensation, aid for the blinded, "wheel chair" homes, and other benefits, the VA announced.

A peacetime veteran may be entitled to hospitalization, outpatient medical and dental treatment and prosthetic service if he was discharged under other than dishonorable conditions for a disability incurred in the line of duty or is receiving compensation for service-connected disability.

The Veterans Administration may provide special aid to blind veterans who are entitled to compensation for service-connected disabilities. Seriously disabled veterans who cannot get about without the aid of a "wheel chair" home and are entitled to compensation for permanent and total service-connected disability for the loss, or loss of use, of both legs due to certain specified conditions, may receive a federal grant.

PSYCHIATRY AND NEUROLOGY MEETING IN LITTLE ROCK

The seventh annual Institute in Psychiatry and Neurology is being held at the Veterans Administration Hospital, North Little Rock, February 24-25. Scientific papers and panel discussions will be given by members of the Veterans Administration Hospital, other Little Rock physicians, and the following out-of'state participants: Dr. Bernard J. Alpers, Philadelphia; Dr. Werner W. Boehm, Minneapolis; Dr. Joseph B. Bounds, Jefferson Barracks, Mo.; Dr. George M. Lyon and Dr. Winfred Overholser, Washington, D. C.; Dr. Gardner Murphy, Topeka, Kan.; Dr. Arthur P. Noyes, Norristown, Pa.; and Dr. Sandor Rado, New York.

There is no registration fee for the meeting, and a Dutch treat luncheon is being held both days of the meeting. Tickets for a dinner at the Marion Hotel the evening of February 24 are $3. Entertainment for the ladies is being sponsored by the Fort Roots Ladies Club.

PATHOLOGISTS MEETING IN DALLAS

The Texas Society of Pathologists met in Dallas, January 29-30, and elected Dr. C. B. Sanders, Houston, president; Dr. Lloyd R. Hershberger, San Angelo, vice-president; and Dr. M. H. Grossman, Dallas, secretary-treasurer.

A panel discussion was given by representatives of the Texas Medical Association; Dr. John J. Andujar, Fort Worth; Ernest Raba, dean of the St. Mary's University School of Law, San Antonio; and Warren McKenney, professor of law at the San Antonio university.

The Caldwell scientific award was given posthumously to Dr. Paul Brindley, late professor of pathology of the University of Texas Medical Branch, Galveston. Dr. George T. Caldwell's widow, Dr. Janet Caldwell, presented a scroll and gold medal to Mrs. Brindley. Reminiscences of Dr. Caldwell and eulogies to Dr. Brindley were given at the banquet.

Obstetrics and Gynecology Board Examinations

The next scheduled part two examinations for candidates for the American Board of Obstetrics and Gynecology will be given at the Edgewater Beach Hotel, Chicago, by the entire board from May 12 through May 20. Both oral and clinical examinations will be given at this time, and formal notice of the exact time of each candidate's examination will be sent to him in advance of the examination dates.

Those candidates who participated in the part one examinations should have case abstracts in the office of the secretary prior to February 28 if they were not submitted at the time of the written examination. These should be sent to Dr. Robert L. Faulkner, 2105 Adelbert Road, Cleveland 6.

CANCER RESEARCH SYMPOSIUM IN HOUSTON

The ninth annual M. D. Anderson Symposium on Fundamental Cancer Research will be held in Houston, March 10-12, at the M. D. Anderson Hospital and Tumor Institute.

The Bertner Award for outstanding contribution in the field of cancer research will be made the evening of March 11 at a banquet to be held in the Doctor's Club of the Jesse H. Jones Library Building. Dr. George N. Papanicolaou of Cornell University College of Medicine, New York, recipient of the award, will give the Bertner Lecture, "Reflections of the Evolutionary Dynamics and Trends of Exfoliative Cytology," after the presentation of the award to him.

The first day of the program will be a review of the current research projects at the hospital, with the first formal gathering that evening. A discussion of the epidemiology of cancer will be given by Miss Eleanor Macdonald of the Anderson staff, and a presentation on experimental design will be given by John Fertig, Ph. D., professor of statistics, Columbia University Medical School.

Dr. George Gomori, University of Chicago, will be chairman of the second day of the program, which is devoted to histochemistry. Six national speakers will present scientific papers this day of the program.

A. Clark Griffin, Ph. D., of the Anderson staff is in charge of the third day of the program, which will be a series of papers reflecting current cancer research in the Southwest.

INTERNATIONAL ACADEMY OF PROCTOLOGY

The International Academy of Proctology will meet in New York, March 23-26. The Academy's sessions will be held at the Hotel Plaza on March 23, 25, and 26, and at the Jersey City Medical Center on March 24.

Panel discussions on cancer of the lower intestine and on ulcerative colitis, operating clinics, and a symposium on intestinal surgery and related conditions will be given during the meeting. A special group of film demonstrations will be presented in a visual education session.

The Academy invites all physicians to attend its meeting and has scheduled a discussion of proctology in general practice. American Academy of General Practice members will be given credit for attending.

Temple Postgraduate Course

The University of Texas Postgraduate School of Medicine, Temple Branch, has announced a Medical and Surgical Conference, March 7-9, 1955, to be sponsored by the Scott, Sherwood and Brindley Foundation, and to be presented in Temple by members of the staff of Scott and White Clinic. Directed primarily toward the interest of the physician in private practice, the morning sessions will consist of operative clinics directed by the surgeons, with consulting internists, radiologists, and pathologists; and the afternoon session will be composed of round table luncheon discussions, panels, symposiums, and clinicopathologic conferences. Each evening a formal lecture will be presented, and a banquet lecture will be given the final night.

Registration forms are available from the Assistant Dean, University of Texas Postgraduate School of Medicine, Temple Division, Temple.

Poliomyelitis Vaccine Policies Set

Representatives from the fields of general medicine, pediatrics, and public health as well as from the federal government recently met with a group from the National Foundation for Infantile Paralysis to consider nationwide policies relative to the distribution and administration of the supply of poliomyelitis vaccine being purchased by the National Foundation for a possible vaccination program this spring.

The deliberations were predicated on the assumption that the evaluation report on the 1954 poliomyelitis field trials to be issued about April 1 by Dr. Thomas Francis, Jr., of the University of Michigan would justify the licensure of this product by the National Institutes of Health, U. S. Public Health Service.

The consensus was as follows:

1. That if and when licensed by the National Institutes of Health, the vaccine will be supplied by the National Foundation to state health officers in amounts sufficient to provide for the vaccination of (a) children who participated in the vaccine field trial in 217 field trial areas in the United States in 1954 but who did not receive vaccine at that time and (b) all children enrolled in the first and second primary grades of all public, private and parochial schools in the continental United States, Alaska and Hawaii in the spring term of 1955.

2. The plan of administration of the vaccine in any state or territory will be the administrative responsibility of the respective state or territorial health officer and will be worked out by him in cooperation with the state or territorial medical society and state or territorial education officials.

3. The 1955 vaccine program has been initiated by the National Foundation for the purpose of making possible early and widespread application of a newly established preventive measure against paralytic poliomyelitis; after completion of this program, the National Foundation will not participate in the production, distribution or administration of poliomyelitis vaccine.

4. The children in the first and second grades of primary school were selected for the program because of the high incidence of paralytic poliomyelitis in this group and their accessibility as organized units within the schools, keeping in mind the limitations on the amount of vaccine to be available for this program.

5. It is expected that additional vaccine, equivalent or greater in amount than that contracted for by the National Foundation, will be obtainable through usual commercial channels for the use of private physicians for their patients.

6. Vaccine for use in 1955 will be administered on the same dosage schedule as was followed in the 1954 field trial, namely 1 cc. of vaccine in each of the three doses, given intramuscularly, the second inoculation one week after the first and the third inoculation four weeks after the second.

7. Administrative procedures for the giving of the vaccine will be as simple as possible and will not require extensive record-keeping. Except in those states which wish and are in a position to conduct follow-up studies, no extensive nationwide evaluation such as was done in the 1954 field trial is contemplated.

8. Upon request from state health officers, the National Foundation will supply educational and other printed materials for use in the conduct of the vaccination program and will provide local cooperation and assistance through its chapters in all counties as requested by local health authorities.

COMMISSIONED INACTIVE RESERVISTS FOR PUBLIC HEALTH SERVICE

The commissioned reserve of the United States Public Health Service is being expanded and reorganized to reinforce public health agencies in times of national emergencies, and an inactive commissioned reserve is being set up. To qualify as an inactive reservist, a person must be an American citizen and must be at least twenty-one years old with a professional degree in a health or allied profession; he must have the basic qualifications for a commission in the Public Health Service Commissioned Reserve. A reserve officer may request active duty in the Public Health Service, but he will not be called to active duty without his consent except in a national emergency publicly recognized as so serious to require such action.

As a part of the expansion program, the service is developing methods to train and inform reserve officers in the newest professional methods developed for dealing with emergency health problems, particularly those associated with atomic, biological, and chemical warfare. As expansion goes forward, it is hoped that reserve officers who can arrange to be away from their practice or regular work for brief periods can be given intensive training.

With the present plan calling for emphasis initially to be on the commissioning of physicians, dentists, sanitary engineers, and nurses, the need is greatest for physicians. The service expects to commission an additional 2,000 reserve officers by June 30 of this year, and present plans call for the commissioning of another 3,000 officers during the 1955-1956 fiscal year.

Grades in this reserve correspond to the grades in the regular commissioned corps of the Public Health Service and to grades in the Army, Navy, and Air Force. An officer is appointed to a grade on the basis of his years of education, training, and experience. All commissions are for a period of five years and are renewable at the end of each period; an officer can resign his commission at any time.

The Public Health Service was assigned extensive new defense responsibilities as the result of a delegation of the Federal Civil Defense Administration to the Department of Health, Education, and Welfare, which was approved by the President. The Service is also widening research in disaster health problems.

This plan of the Public Health Service was approved by the Executive Council of the Texas Medical Association at its January meeting upon the recommendations of the Committee on Public Health and the Committee on National Emergency Medical Service.

Additional information and application blanks may be obtained by writing the Regional Medical Director of the Public Health Service, Department of Health, Education, and Welfare, 901 Ross Avenue, Dallas 2.

AWARDS OFFERED RESEARCHERS

Five awards of approximately $840 each will be given by the Ciba Foundation in July, 1955, for research in the problems of aging. These awards, to be based on papers submitted by February 28, will be made to promote international cooperation in medical and chemical research and to encourage well-conceived research relevant to basic problems of aging. The work submitted must be unpublished (but may be under consideration for publication). The papers may be in the candidate's own language, but a summary in English not exceeding five hundred words must be attached. Additional information can be obtained from G. E. W. Wolstenholme, Director and Secretary to the Executive Council, 41 Portland Place, London, W.1.

RADIOTHERAPY POSTGRADUATE COURSE

The University of Texas Postgraduate School of Medicine is offering a course in radiotherapy in cooperation with the Texas Medical Association, the Texas State Department of Health, and the Texas Academy of General Practice. The course is to be given each Monday afternoon from 5:00 to 6:00 p. m. from March 7 through May 30 at the M. D. Anderson Hospital and Tumor Institute, Houston.

Dr. Fernando Bloedorn, Houston, will be the instructor in charge, with Dr. Gilbert H. Fletcher, Dr. Lowell S. Miller, and Dr. Carlos Cuocia, all of Houston, also participating in the teaching program.

The tuition fee is $25 for all persons except interns, residents, medical students, military medical students, and faculty members and personnel. Application blanks may be obtained from hospital administrators or from the office of the University of Texas Postgraduate School of Medicine, Texas Medical Center, Houston 25.

LIBRARY ASSOCIATION ENTERTAINED

The Memorial Library of the Texas Medical Association was host to the Southern Regional Group of the Medical Library Association at a meeting February 5 in Austin for which Chauncey D. Leake, Ph. D., executive director of the University of Texas Medical Branch, Galveston, was featured speaker. Dr. Morris Polsky, Austin dermatologist, and Professor Esther M. Stallman, member of the University of Texas library science faculty, also addressed the assemblage of medical librarians from the southern states.

Dr. S. N. Key, member of the Board of Trustees of the Texas Medical Association, and Mrs. Key; C. Lincoln Williston, the organization's executive secretary; and Dr. J. M. Coleman, president of Travis County Medical Society, assisted in making the visitors welcome.

Luncheon and a tour at the Medical Association building, a tour of the University of Texas Library, cocktails as guests of the J. A. Majors Company, and dinner at a downtown hotel as guests of the Texas Medical Association were a part of the program.

Miss Pauline Duffield, librarian of the host Library, is treasurer of the Medical Library Association.

BASIC SCIENCES EXAMINATION APRIL 15-16

The Texas State Board of Examiners in the Basic Sciences will give an examination on April 15 and 16 in Galveston, Houston, and Dallas. All arrangements should be completed one week before the time of the examination. Details may be obtained from Mrs. Betty Ratcliff, Chief Clerk, 407 Perry-Brooks Building, Austin.

CENTRAL TEXAS SPRING CLINIC

The spring clinic of the Central Texas Journal Club will meet on March 2 in Waco.

Speakers will be Dr. Edgar F. Hull, Louisiana State University School of Medicine, New Orleans; Dr. A. H. Bell, University of Oklahoma School of Medicine, Oklahoma City; Dr. J. B. Griffin, Southwestern Medical School of University of Texas, Dallas; Dr. Leonard F. Peltier, University of Minnesota School of Medicine, Minneapolis; and Dr. Lester Segal, Veterans Administration Center, Waco. Dr. Hull will speak on "Atypical Manifestations of Amebic Abscess of the Liver"; Dr. Bell, "Tracheo-Esophageal Fistula with Atresia"; Dr. Griffin, "Pelvic Pain"; Dr. Peltier, "Fractures of the Pelvis and Associated Injuries"; and Dr. Segal, "Bilateral Pre-Frontal Leucotomy."

Members of the Texas Medical Association and physicians on duty with federal agencies are invited to attend the meeting without payment of a registration fee. A fee of $3 will be charged those attending the luncheon at noon and the cocktail party, which will be immediately after the scientific program. Registration is at 9 a. m. Additional information may be obtained from the secretary, Dr. Milton Spark, 121 Dallas Street, Waco.

Dallas Southern Clinical Society

The Dallas Southern Clinical Society will have eighteen guests participating in the twenty-fourth annual spring clinical conference, March 14-17.

Guests are Dr. Kenneth E. Appel, Philadelphia; Dr. Vincent W. Archer, University, Va.; Dr. Paul A. Chandler, Boston; Dr. Conrad G. Collins, New Orleans; Dr. Clinton L. Compere, Chicago; Dr. Arthur C. Curtis, Ann Arbor; Dr. Sydney S. Gellis, Boston; Dr. Edgar S. Gordon, Madison, Wis.; and Dr. Robert E. Gross, Boston. Also, Dr. Robert Lich, Jr., Louisville; Dr. Milton L. McCall, New Orleans; Dr. Carl A. Moyer, St. Louis; Dr. Neal Owens, New Orleans; Dr. Joel J. Pressman, Los Angeles; Dr. G. O. Proud, Kansas City, Kan.; Dr. Bronson S. Ray, New York; Dr. Harold G. Scheie, Philadelphia; and Dr. Eugene A. Stead, Jr., Durham, N. C., will participate.

The program will include general assemblies, round-table luncheons, a clinical pathological conference, lectures, motion pictures, panel discussions, and technical and scientific exhibits. To be eligible to register, a physician must be a member of a county medical society; the registration fee of $25 is payable in advance to Dallas Southern Clinical Society, Medical Arts Building, Dallas. Physicians planning to attend should make hotel reservations at the hotel of their choice.

General Practitioners to Meet in Los Angeles

The seventh annual scientific assembly of the American Academy of General Practice will be held in Los Angeles, March 28-31. The program will be given in Shrine Auditorium and will feature thirty-two top medical speakers from all over the United States. Dr. Andrew S. Tomb, Victoria, is chairman of the Academy's Committee on Scientific Assembly, which is responsible for planning the scientific program.

Speakers will participate on panel discussions on childhood disasters, diabetes, peripheral vascular diseases, neurology, handling athletic injuries, endocrinology, and preserving the doctor's life. Some of the other topics which will be covered include newer concepts of allergy therapy, treatment of the ambulatory fracture case, anesthetic emergencies, the negative roentgenogram, and medical aspects of crime detection.

The highlight in the social program will be the President's Reception the evening of March 30 in the Hotel Statler. Presidential induction ceremonies for Dr. John R. Fowler, Barre, Mass., will be held during the reception.

Four trips to Hawaii have been planned after the congress; information about them may be obtained from Lee Kirkland Travel, 1231 Baltimore Avenue, Kansas City, Mo.

COLLEGE CHEST ESSAY AWARD

The best contribution on any phase of the diagnosis and treatment of chest diseases by an undergraduate medical student studying for a degree in medicine will bring a cash award of $250 by the Council on Undergraduate Medical Education of the American College of Chest Physicians. Second prize will be $100, and third prize, $50. The three best contributions will be announced at the twenty-first annual meeting of the American College of Chest Physicians, Atlantic City, N. J., June 2-5.

Applicants, asked to study the format of *Diseases of the*

Chest for information as to length, form, and arrangement of illustrations, must submit five copies of the manuscript typewritten in English to the executive director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, before April 10. The only means of identification of the author shall be a motto or other device on the title page and a sealed envelope bearing the same motto on the outside with the name and address of the author enclosed. Also a letter from the dean or chairman of the department of medicine of the medical school certifying that the author is a medical student studying for his degree in medicine must be enclosed.

CLINICAL HYPOXIA MEETING

The Society for the Prevention of Asphyxial Death has called a meeting for March 24, 8 p. m. at the New York Academy of Sciences to celebrate the completion of 100 courses in clinical hypoxia, with all students who have attended the courses invited.

An award will be presented to Dr. Paluel J. Flagg, New York, who organized and directed the courses since their inception in April, 1947. Admission to the meeting will be by card, which may be obtained from the secretary, S.P.A.D. Inc., 2 East Sixty-Third Street, New York 21.

TEXAS PROCTOLOGIC SOCIETY TO MEET

The Texas Proctologic Society will meet on February 26 in Dallas, with registration at 8:30 a. m. at Baylor Hospital. At 9 a. m. an operative clinic will be held at the hospital, and a luncheon will follow at the Dallas Club. That afternoon a round-table discussion and a business meeting are scheduled at the Dallas Club, with a dinner including guests scheduled for that evening.

Dr. Jack Kerr, Dallas, is in charge of arrangements for the meeting.

MORE NURSE STUDENTS IN 1954

More students entered schools of professional and practical nursing in 1954 than in any year since World War II, according to John H. Hayes, chairman of the Committee on Careers, National League for Nursing.

Schools of professional nursing in the United States and territories admitted 44,930 new students, a 3.7% increase over the 43,327 admitted in 1953. However, the admission of future nurses to the thirty-one Texas schools dropped from 1,209 in 1953 to 1,181 in 1954.

Although returns from schools of practical nursing are incomplete, Mr. Hayes said that reports indicate that the schools will also show an increase in the number of students admitted.

The professional schools graduated 28,539 students in 1954.

Infant Mortality Decline

Infant mortality for 1954 dropped to an all-time low rate of 26.7 per 1,000 live births, statisticians of the Metropolitan Life Insurance Company report. The 4,060,000 babies born during the past year was more than 2 per cent above the previous high established in 1953.

The 26.7 per 1,000 live births represents a reduction of almost 5 per cent mortality from the previous low recorded in 1953.

LIBRARY SECTION

REPORT FOR 1954

In presenting the statistical report of the Memorial Library of the Texas Medical Association for 1954, it is only fitting that the Library and its collection be defined in relation to the members and the Association. A library has been defined as a collection of books and manuscripts kept for use but not for sale. The function of a library is to pass on to the users important information necessary to their work. Are these statements true of this Library? Members of the Texas Medical Association have provided the books and a beautiful building to house them. The Library is constantly growing, and it should be a power within the organization as well as an inspiration to each member. In possessing a library, Texas physicians have access to facts. Are you taking advantage of the services? Only by using the library will it become one of the outstanding medical libraries in the country.

The staff is proud of the increase in the use of the Library facilities this past year. There were only sixty-one counties in the state from which no request for material was received in 1953 or 1954. It is hoped every member of the Texas Medical Association will use the Library during the coming year.

The motion picture films have all been previewed, and the Library has an up-to-date collection. There were 10 new films added the past year and more are to be added in the coming months. The staff is always open to suggestions for new titles, and each member of the Association is invited to make known his wants.

The Library received many gifts including personal libraries, rare books, journals, old instruments, and cash donations. Acknowledgment of each of these gifts has appeared in the JOURNAL. The Library is always in need of journals. Physicians who do not keep files of their journals are asked to remember the Library.

The endowment fund is the Library's security for the future. For those who are not aware of this fund, the staff will be happy to explain it.

The statistical report of the Library and its activities for 1954 follows:

GIFTS IN 1954

Unbound issues	12,454
Bound volumes	811
Books	372
Total	13,637

CIRCULATION

Reprints	7,215
Journals	5,410
Books	864
Bound journals	473
Bibliographies prepared	44
Telephone broadcasts	20
Tape recordings	58
Films	570
Requests sent	2,104

Ten years ago there were 444 requests filled; in 1954 the total reached 2,104. The staff would like to see this Library serve each doctor in the state.

JOURNALS CEASING PUBLICATION

American Journal of Syphilis, Gonorrhea, and Venereal Disease, Nov.-Dec., 1954.

Brooklyn Hospital Journal, Dec., 1954.

BOOKS RECEIVED IN JANUARY

Albritton, Errett C.: *Standard Values in Nutrition and Metabolism,* Philadelphia, W. B. Saunders, 1954.

Beckman, Harry, ed.: *Year Book of Drug Therapy, 1954-55,* Chicago, Year Book Publishers.

Callahan, Parnell: *The Law of Medicine,* New York, Oceana Publishers, 1950.

Castellano, Francesco, and Ruggiero, Giovanni: *Meningiomas of the Posterior Fossa,* Acta Radiologica, Supp. 104, 1954.

Dittmar, William R.: *Insanity Laws,* New York, Oceana Publishers, 1952.

Fish, John S.: *Hemorrhage of Late Pregnancy,* Springfield, Ill., Charles C Thomas, 1954.

Galdston, Iago, ed.: *Medicine and Science, Lectures to the Laity,* no. 16, New York Academy of Medicine, New York, International Universities Press, 1954.

Golter, Samuel H.: *The City of Hope,* New York, G. P. Putnam's Sons, 1954.

Green, Morris, and Richmond, Julius B.: *Pediatric Diagnosis,* Philadelphia, W. B. Saunders, 1954.

Gregory, John E.: *Pathogenesis of Cancer,* ed. 2, Pasadena, Calif., Fremont Foundation, 1952.

Harvey Society of New York: *Harvey Lectures, 1952-53,* Series 48, New York Academy of Medicine, New York, Academic Press.

Hollander, Joseph Lee, ed.: *Comroe's Arthritis,* ed. 5, Philadelphia, Lea and Febiger, 1953.

Holt, John Floyd, and others: *Year Book of Radiology, 1954-55,* Chicago, Year Book Publishers.

Hussar, Allen E., and Holley, Howard L.: *Antibiotics and Antibiotic Therapy,* ed. 1, New York, Macmillan, 1954.

Lawrence, John H., and Hamilton, Joseph G.: *Advances in Biological and Medical Physics,* vol. 2, New York, Academic Press, 1951.

Lawrence, John H., and Tobias, C. A.: *Advances in Biological and Medical Physics,* vol. 3, New York, Academic Press, 1953.

Leavy, Morton L.: *The Law of Adoption,* New York, Oceana Publishers, 1948.

Lewis, Nolan D. C., and Yarnell, Helen: *Pathological Firesetting (Pyromania),* Nervous and Mental Disease Monograph, no. 82, New York, Coolidge Foundation, 1951.

Lichtman, S. S.: *Diseases of the Liver, Gallbladder and Bile Ducts,* vol. 1-2, ed. 3, Philadelphia, Lea and Febiger, 1953.

McVay, Chester: *Hernia, The Pathologic Anatomy of the More Common Hernias and Their Anatomic Repair,* ed. 1, Springfield, Ill., Charles C Thomas, 1954.

Netter, Frank H.: *Reproductive System,* Ciba Collection of Medical Illustrations, vol. 2, Summit, N. J., Ciba Pharmaceutical Products, 1954.

Penfield, Wilder, and Jasper, Herbert: *Epilepsy and the Functional Anatomy of the Human Brain,* ed. 1, Boston, Little, Brown and Co., 1954.

Portis, Sidney A.: *Diseases of the Digestive System,* ed. 3, Philadelphia, Lea and Febiger, 1953.

Shaw, James H., ed.: *Fluoridation,* Washington, D. C., American Association for the Advancement of Science, 1954.

Singer, Marcus, and Yakovlev, Paul I.: *The Human Brain in Sagittal Section,* ed. 1, Springfield, Ill., Charles C Thomas, 1954.

NEW JOURNALS

Journal of Chronic Disease, vol. 1, no. 1, Jan., 1955.

Audio-Digest Chooses Texas Article

One of the fourteen articles and three lectures included in volume 1, number 1 of the Audio-Digest series on pediatrics is from the TEXAS STATE JOURNAL OF MEDICINE. "Peptic Ulcer in Children," written by Drs. Leslie L. Lemak, Palmer E. Wigby, and John E. Martin of Houston and published in the November, 1954, issue of the Texas JOURNAL, has been recorded by the California nonprofit agency which recently began making available to the nation's doctors tape recordings of select current literature.

Proceeds from the Audio-Digest Foundation, 800 North Glendale, Glendale, Calif., go to the American Medical Education Foundation.

The pediatrics tape is available for loan from the Texas Medical Association Memorial Library.

CONTRIBUTIONS TO THE LIBRARY

Grateful acknowledgment is made by the Texas Medical Association Memorial Library for the following recent gifts:

Miss Estelle R. Hudson, Austin, 2 books.

Mrs. Thomas McCrummen, Austin, 67 journals, 120 books, all from the late Dr. McCrummen's library.

Dr. Nelson L. Schiller, Austin, 15 journals, 14 reprints.

Dr. S. P. Todaro, Austin, 20 books.

Capt. Charles F. Zukoski, III, M.C., Austin, 24 journals.

MOTION PICTURES FOR LOAN

What To Do, Series I

16 mm., sound, six 5-minute features.

These well-done short films on "The Medicine Cabinet," "Life Saving," "Headache," "Abdominal Pain," "Thermometer," and "The Common Cold" are helpful for lay groups. They may be used separately or in a series.

A Technique for Operative Management of Strangulated Femoral Hernia

16 mm., silent, color, 20 minutes. By Jake Shapira, M. D., Midland. Approved by the Committee on Medical Motion Pictures of the American College of Surgeons.

This film shows a technique of dealing with strangulated femoral hernias utilizing a combined abdominal and femoral approach through one incision. The anatomy of this region is clearly shown, and the actual procedure is demonstrated on a strangulated femoral hernia requiring resection in an 88 year old man.

Problems of Rheumatoid Arthritis

16 mm., sound, color, 33 minutes. Produced for The Arthritis and Rheumatism Foundation by Medical Film Guild, Ltd., New York.

This film reviews the incidence of arthritis, its economic and social significance, the lack of facilities for care, and the small sums available for medical research. The possible causes and the treatments of rheumatoid arthritis are given.

BOOK NOTICES

The Child, His Parents and the Physician

HALE F. SHIRLEY, M. D., *Professor of Pediatrics and Psychiatry, Director of the Child Psychiatry Unit, Stanford University School of Medicine, San Francisco. 159 pages. $3.75. Springfield, Ill., Charles C Thomas, 1954.*

In the preface the author states that the book contains essentially the contents of talks to medical students. The emotional needs and the development of the child are cov-

ered in an interesting and simple manner and would make interesting reading for many parents. The book was written for the general practitioner and the pediatrician in order that they would find enjoyment and satisfaction in dealing with childhood emotional disturbances.

Atlas of Gynecologic Pathology

ANTHONY V. POSTOLOFF, M. D., *Pathologist and Director of Laboratories, Millard Fillmore Hospital, Buffalo, N. Y.; Associate in Pathology, University of Buffalo School of Medicine, and* DAVID H. NICHOLS, M. D., *Capt., M. C., USAF; Formerly Chief Resident Obstetrician-Gynecologist, Millard Fillmore Hospital, Buffalo, N. Y. 100 color slides, with descriptive manual. Baltimore, Williams and Wilkins Company, 1952.*

The colored slides, each 2 by 2 inches, are mounted in aluminum, and are in a case bound like a book that also holds the descriptive manual. The slides give a third dimensional effect and satisfactorily suggest the natural appearance of fresh pathologic specimens. The manual contains descriptions of the slides with pertinent data from case histories and other helpful information.

[1]Surgical Infections

EDWIN J. PULASKI, M. D., D.M.Sc. (Surg.), *Lt. Col., M. C., USA; Deputy Director, Division of Surgery, Walter Reed Army Medical Center. 332 pages. $7.75. Springfield, Ill., Charles C Thomas, 1954.*

Although the author calls this book a manual, it contains more substance than might be expected in that type of book. This is probably the result of the author's extensive experience in surgical bacteriology, laboratory research, and clinical application of these studies to surgical infections, all being closely integrated in an Army bacteriologic laboratory and surgical service, as Michael E. De Bakey points out in the foreword. It therefore conveys an authority that comes only with thorough knowledge of a subject. Written with the military surgeon in mind, the author points out where military and civilian techniques differ.

The book is divided into two parts. In part one, general considerations of antibiotic therapy are discussed; and a chapter describing in detail the characteristics, dosage, and routes of administration of the present available antibiotics is found. In part two, the management of specific surgical infections is outlined, with major emphasis on antimicrobial therapy. There is also an appendix of tables showing the distribution of various antibiotics in body fluids, such as bile, cerebrospinal fluid, serum, and urine, estimated in hours after a single dose.

The theme of this monograph is the practice of sound surgical principles with the place of antimicrobial drugs as "adjunct therapy." The writer never gets away from sound surgical procedures but finds the proper place for these drugs in surgical infections. He states that they are not to be used as substitutes for surgery, but as supplements to surgery.

The author emphasizes the dangers of these drugs as well as their usefulness. He sympathizes with the general practitioner who may realize this problem but is caught between the demands of the patient, on the one hand, and the realization, on the other, that if he does not give them, someone else will. Nevertheless, the responsibility rests squarely on the physician and must not be sidestepped. Already new bacterial species are predominating in some areas of the body; others, once responsive, have become resistant, and reactions are not uncommon and are apparently becoming more and more common and severe.

This unquestionably authoritative work is recommended to physicians and surgeons who treat surgical infections in which antimicrobial drugs may be used. It will be found useful not only in the unfamiliar condition but in the more common everyday surgical infections, and the reader will be reminded over and over that in the management of surgical infections, surgery still occupies the prominent position while antibiotics, when used properly, play an important role as "adjunct therapy."

The book contains a comprehensive bibliography and is well indexed.

[2]Manual of Clinical Mycology

NORMAN F. CONANT, Ph. D., *Professor of Mycology and Associate Professor of Bacteriology, Duke University School of Medicine. Ed. 2. 456 pages. $6.50. Philadelphia, W. B. Saunders, 1954.*

This is the first revision and enlargement of the practical little manual brought out during the war under the sponsorship of the National Research Council. The same style and format are followed, and the treatment of the subject matter is still concise and entirely practical. Virtually no theory is covered in this book.

The newer knowledge especially of the granulomatous mycoses is presented, including some interesting data on epidemiology of this type of fungus infection, which is now much better understood. Also the lighting up of latent fungus infection following exhibition of antibiotic drugs is included in this manual. Newer techniques such as the periodic stain are described.

There are 88 illustrations in this edition, and these continue to uphold the standard of clarity previously achieved. This continues to be a useful and practical book both for the laboratory worker and the clinician.

[3]The Acute Phase of Poliomyelitis

ALBERT G. BOWER, M. D., *Editor. 257 pages. $6.50. Baltimore, Williams and Wilkins Company, 1954.*

This book has been compiled from the experience accumulated by the staff of the Los Angeles County Hospital over the past twenty-five years, during which time more than 18,000 poliomyelitis patients have been diagnosed and treated, with 11,000 in the past seven years. As a handy, quick reference manual, it should appeal to the general practitioner or even to one who has occasion to see this disease more frequently.

Special stress is placed on the importance of early recognition and management of respiratory insufficiency, which is emphasized as the primary cause of death in acute cases. There is discussion of prophylaxis in contacts, diagnosis and differential diagnosis, changes in blood chemistry, and mechanical devices used in treatment. Tests for muscle power and function are discussed and illustrated with diagrams for grading of spasm. There are chapters on medical management of the acute phase, as well as the role of the otolaryngologist and radiologist in pulmonary complications.

Nursing procedures, so important in these patients, are well discussed, as is the use of physical medicine. Problems peculiar to the obstetric patient, transportation of the patient in the respirator, and orthopedic management are considered. Finally, the organization of a hospital poliomyelitis team for the epidemic is presented.

This book should be a useful addition to the therapeutic armamentarium of any physician who has occasion to handle this type of patient.

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[1]*Ernest H. Morris, M. D., Canadian.*

[2]*Morris Polsky, M. D., Austin.*

[3]*William V. Coventry, M. D., Dumas.*

[4]**Nerve Blocks**

JOHN ADRIANI, M. D., *Director, Department of Anesthesiology, Charity Hospital of Louisiana; Professor of Surgery, Tulane University of Louisiana School of Medicine; Associate Clinical Professor of Surgery, Louisiana State University School of Medicine, New Orleans. 265 pages. $6.50. Springfield, Ill., Charles C Thomas, 1954.*

This book is an enlargement of the section on regional anesthesia in the author's text "Techniques and Procedures of Anesthesia." The writing continues the outline form of its predecessor, with bibliography almost nonexistent. The chief merit of this book lies in its presentation of a number of blocks not usually included in manuals on regional anesthesia, for example the glossopharyngeal block. Although designed for beginners in anesthesia, other works will perhaps be more suitable.

[5]**Clinical Disorders of the Heart Beat**

SAMUEL BELLET, M. D., *Director, Division of Cardiology, Philadelphia General Hospital; Director, Division of Cardiovascular Diseases, Graduate Hospital, University of Pennsylvania; Cardiologist, Einstein Medical Center, Philadelphia. 373 pages. $8.50. Philadelphia, Lea and Febiger, 1953.*

Dr. Bellet divides his subject neatly into four parts. The first section, "General Consideration," includes a concise discussion of the conduction tissue and the factors regulating cardiovascular function. Arrhythmias are classified into four groups according to the portion of the heart in which they arise. General therapy is outlined, and clinical manifestations are briefly grouped.

The second section presents in detail the arrhythmias outlined. Etiology, pathology, symptoms, and treatment are discussed thoroughly in addition to the electrocardiographic findings.

Arrhythmias in certain clinical states are covered in section three. Repetition and redundancy is not present, however, in this section. Syncopal attacks, electrolyte alterations, and myocardial infarction are only a few of the clinical states described under this heading.

Section four is concerned with the drugs used in the therapy of arrhythmias. Digitalis, quinidine, and procaine amide are discussed in sufficient detail.

The illustrations and the reproductions of electrocardiograms are select, plentiful, and beautifully reproduced. Controversial points are discussed freely and treated objectively by the author.

This is an excellent book which should be of interest to most internists. It is an invaluable reference book for all physicians who occasionally see clinical disorders of the heart beat.

[6]**Heart**

ALDO A. LUISADA, M. D., *Associate Professor of Medicine and Director, Division of Cardiology at the Chicago Medical School, under a Teaching Grant of the National Heart Institute, U. S. Public Health Service. Second edition. 680 pages. $15. Baltimore, Williams and Wilkins Company, 1954.*

This book attempts to cover the subject and survey the accumulated literature on cardiovascular diseases in 680 pages. The result is that numerous important phases on the subject are only too briefly covered. This is a fault found with all one-textbook coverage of a large subject. In spite of this, the ample illustrations in this book and the author's correlation of graphic registrations of cardiac function such as phonocardiography and electrokymography with clinical findings should make up for some of the faults mentioned.

It is noted that in the discussion of the treatment of subacute bacterial endocarditis, the author makes the following statement: "A definite step was made with the heparin-sulfonamide treatment which increased the number of recoveries to about 6 per cent." This, of course, is not in keeping with present day thought. The heparin-sulfonamide treatment of subacute bacterial endocarditis was discarded soon after its introduction. The author then discusses the treatment of subacute bacterial endocarditis with penicillin and states that it is the drug of choice. He mentions Terramycin, Aureomycin, the sulfa drugs, and so forth. No place, however, unless this has escaped the reviewer, does he speak of the isolation of the causative organisms, the performance of sensitivity studies, and the application of the proper therapeutic agent based on such findings. Furthermore, according to the author, if none of the above agents is successful one should try emetine or neoarsphenamine. To the reviewer's knowledge these latter drugs were given up many years back. Certainly in the reviewer's own experience neoarsphenamine in the treatment of subacute bacterial endocarditis has not been recommended in more than twenty years, and he recollects that none of those who used this drug were very enthusiastic over the results. The reviewer has had no experience with emetine in the treatment of subacute bacterial endocarditis but believes that most likely he did not miss a therapeutic agent of any importance in this disease.

What is more amazing is the author's recommendations for the treatment of cardiovascular syphilis. He gives a scheme which consists of a two weeks' intensive course of treatment with iodides; then a two weeks' course of treatment with mercury (and his choice appears to be daily inunctions with a strong mercury ointment); then a six weeks' course of treatment with bismuth; then a twelve weeks' course of treatment with arsenicals in the form of Mapharsen, with a gradual increase in doses of Mapharsen. Then he states that instead of Mapharsen, one may substitute penicillin! Such archaic teaching, in the reviewer's judgment, negates whatever usefulness this book might have had.

[7]**Anatomy of the Human Body**

HENRY GRAY, F.R.S., *Late Fellow of the Royal College of Surgeons; Lecturer on Anatomy at St. George's Hospital Medical School, London. Edited by* CHARLES MAYO GOSS, M. D., *Managing Editor of the Anatomical Record; Professor of Anatomy, Louisiana State University School of Medicine, New Orleans. Twenty-sixth edition. 1,480 pages. $16. Philadelphia, Lea and Febiger, 1954.*

The general organization of this text is excellent. It is printed on an excellent grade of paper, and the illustrations are sharp and clear and at the same time are pleasing to the eye and easy to study. The scheme of colors is effective in instruction and makes the subject matter easier to grasp. The embryologic approach to anatomy is well done and is illustrated in good detail. In the section on the spine more liberal use of radiographs should have been made with anatomic identifications taught by this method, also.

The localization of muscle groups topographically is a fine feature and is one of the many things found in this book which makes it practical.

Anatomic landmarks of the skull, mastoids, spine, encephalograms, ventriculograms, arteriograms, and the lung could have had more complete and detailed coverage from

[4]*James W. Lassiter, M. D., Austin.*
[5]*George E. Clark, Jr., M. D., Austin.*
[6]*William Rosenblatt, M. D., Wichita Falls.*
[7]*Joe C. Rude, M. D., Austin.*

roentgenogram point of view so far as anatomy of the parts is concerned. The objection might be raised that this is too advanced for freshmen medical students, but more and more usage of radiologic anatomy is coming into use each year, and this book is kept by many for reference throughout their medical training and early practice.

[8]Electrocardiography

E. GREY DIMOND, M. D., *Professor and Chairman, Department of Medicine, Director, Cardiovascular Laboratory, University of Kansas Medical Center, Kansas City, Kan. 261 pages. $14. St. Louis, C. V Mosby Company, 1954.*

Dr. Dimond states in the preface of his book that electrocardiography has evolved rapidly through a maze of changing nomenclature, new techniques, new machines, new leads, pattern versus vector methods of interpretations, and authority differing with authority, which have resulted in confusion to physicians outside of medical centers. Dr. Dimond has written this book to help clarify some of these factors.

The first few chapters deal with the direct writer. The advantages, limitations, pitfalls, and techniques of this type machine are described in a textbook for the first time. All of the possible causes for deflection of the stylus are mentioned, with the exception of that caused by the patient's wearing nylon.

The electrophysiology of the electrocardiogram with evolution of the normal electrocardiogram is developed in detail by both explanation and adequate demonstrations and tracings. Reducing the mean electrical components of depolorization and repolarization to one single common denominator in preference to pattern interpretation helps the reader to understand the electrocardiogram. He has made another step forward in this excellent presentation.

The clinical application of the abnormal electrocardiogram is presented in sufficient detail to give the controversy of surrounding left and right ventricular hypertrophy; yet, he continues with the other abnormal electrocardiographic patterns, including the effects of disturbances of drugs and the electrolytes.

The section on congenital heart disease by simplified grafts instead of detailed explanation is handled quickly and expertly. There are sufficient tracings to help distinguish any type arrhythmia. The clear cut description of the modus operandi dosage schedules for quinidine and pronestyl will be appreciated by all practitioners.

The book is highly recommended to the beginner and all other physicians interested in electrocardiography.

[9]Diseases of the Skin

GEORGE CLINTON ANDREWS, M. D., F.A.C.P., *Clinical Professor of Dermatology, College of Physicians and Surgeons, Columbia University; Attending Dermatologist to the Presbyterian Hospital, Columbia-Presbyterian Medical Center, New York. Ed. 4. 877 pages. $13. Philadelphia, W. B. Saunders Company, 1954.*

This is the latest edition of previously well written books on diseases of the skin. Dr. Andrews has incorporated his thirty years of academic work and clinical experience in dermatology into a practical and comprehensive text. The book is divided into thirty-eight chapters that cover the latest classifications and most recent developments in dermatology. If one must criticize this edition, it would be directed at the short bibliography at the end of each chapter. On the whole, this is an excellent treatise on diseases of the skin that should be in the library of dermatologists and general practitioners.

[10]Stellate Ganglion Block

DANIEL C. MOORE, M. D., *Director, Department of Anesthesiology, Mason Clinic; Chief of Anesthesia, Virginia Mason Hospital, Seattle, Wash. 280 pages. $10.50. Springfield, Ill., Charles C Thomas, 1954.*

The book consists of four parts. The first is a detailed consideration of the basic anatomy and physiology of the stellate ganglion, the pharmacology of the various drugs used in its block, and an excellent discussion on X-Ray. Part two describes the author's technique, with signs and symptoms of successful block, and the more common complications. The various indications for stellate block, the results to be expected, and the author's experience where applicable are discussed in part three. Part four describes all the techniques found in literature. Each chapter has an excellent bibliography. The book is noteworthy as a compilation in one volume of the literature on stellate block, and as such belongs on the shelf of all those physicians interested in the surgery of the sympathetic nervous system.

[11]Reproductive System

FRANK H. NETTER, M. D., *vol. 2. 286 pages. $13. Summit, N. J., Ciba Pharmaceutical Products, Inc., 1954.*

It is too early to judge, but one begins to wonder if Dr. Netter's work in medical illustration, supported by some of the best minds in physiology, pathology, obstetrics, gynecology, urology, and anesthesia, may not one day take a place in medicine of his time equal to that occupied by da Vinci and Michelangelo in their respective periods of the fifteenth and sixteenth centuries.

What a wonderful thing it would be if these works could be interwoven into the instruction of medical students as they pass through their studies of anatomy, pathology, endocrinology, urology, obstetrics, and gynecology. It would be a worthy objective if all the pharmaceutical firms in this country could band together in a common effort to produce the finest texts in the correlation of histology, anatomy, physiology, and pathology for our medical schools. Without organized support such volumes as this text cannot be produced and without continued support in all likelihood will become in time book collectors' items.

The clarity with which each subject is concisely presented is unexcelled. The artistic work, showing the gross specimen, anatomically, histologically, and pathologically and in some instances the radiological demonstration of lesions, makes of this text an invaluable addition to the student's and practitioner's library alike. In the illustration of acute toxemia of pregnancy, for example, the author even shows illustrations of eyeground changes along with the changes in the liver and placenta. Diagrammatic illustration of the hormonal fluctuations in pregnancy adds a final and interesting touch to this subject.

The treatment of both the male and female reproductive systems in the one text portrays the relationship as well as the differences, and in this day of more and more specialization it is refreshing to see someone dare to bring more than one specialty together and attempt to tie things together as they should be.

One can only hope that the author of this work may be able to progress from one system to another until the remainder of the systems have been treated in a similar manner. The reviewer is inclined to be critical, but there is really little with which to find fault in this work. One wishes only that this valuable work will continue. Motion pictures depicting this work in color would be well received.

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[8]*Lang F. Holland, M. D., Austin.*
[9]*D. O. Poth, M. D., San Antonio.*
[10]*James W. Lassiter, M. D., Austin.*
[11]*Joe C. Rude, M. D., Austin.*

ORGANIZATION SECTION

AMERICAN MEDICAL ASSOCIATION

AMA Committee on Toxicology

A Committee on Toxicology has been established by the American Medical Association to study the health problems of drugs, household goods, and other materials, and to supply educational material to the public.

This committee was set up because of the problem of accidental poisoning in children; in 1949-1950, the number of deaths from that cause in the United States for children under 5 was 2.6 per 100,000 population, four times that of Great Britain. One third of these were from drugs—the commonest of which was aspirin.

According to an editorial in the January 22 *Journal of the American Medical Association,* the problem far exceeds that of leading childhood diseases if you add to accidental deaths the number of children crippled by poisons.

Other hazards besides aspirin are common household items like liniment, bleaching agents, lighter fluid, cleaning fluid, insect spray, rat poison, permanent wave solution, shampoo, nail polish remover, antifreeze, detergents, furniture polish, ammonia water, and kerosene.

The editorial stated that most cases of accidental poisoning should be prevented; but that when they happen, prompt and appropriate treatment can save a life. Cooperative efforts now aiming at a solution of the problem "should go far to bring the record of the United States down to that of other highly industrialized countries," the editorial stated.

Homan Resigns AMA Council

Dr. Robert B. Homan, El Paso, resigned as a member of the American Medical Association Council on Medical Service at the time of the November-December AMA meeting in Miami. Dr. A. C. Scott, Temple, was appointed to fill the vacancy until the AMA House of Delegates meets in June, at which time Dr. Homan's unexpired term will be filled by the House.

TEXAS MEDICAL ASSOCIATION

MARCH VISITATIONS

Members of the central office staff and officers of the Texas Medical Association have scheduled visitations to the following county medical society, district society, and woman's auxiliary meetings during March:

March 3—Dallam-Hartley-Sherman-Moore Counties Medical Society.

March 8—Woman's Auxiliary to the Taylor-Jones Counties Medical Society.

March 9—Nueces County Medical Society.

March 14—Cooke County Medical Society.

March 17—Ninth District Medical Society.

FIELD DIRECTOR ADDED TO ASSOCIATION STAFF

J. Stuart Page assumed the duties of field director of the Texas Medical Association on February 1. During the past five years, Mr. Page has been business manager for St. Stephen's School in Austin, auditor for the Casualty Insurance Commission, and graduate student at the University of Texas.

Page was awarded his bachelor of business administration degree from the University of Texas in 1949 and served as a technical sergeant radioman-gunner with the United States Air Force in five major campaigns of the South Pacific during World War II. He is married and has two sons, ages 4 years and 15 months.

INTERIM REPORTS PRESENTED

Several distinguished guests, twenty-three committee meetings, and a luncheon served complimentary at the headquarters building helped to bring to the Texas Medical Association building in Austin on January 22 and 23 the largest group to assemble for an "Executive Council meeting week-end."

Saturday, January 22, was devoted to a Conference of County Medical Society Officials and meetings of Association committees. The conference featured addresses by Dr. George F. Lull, Secretary and General Manager of the American Medical Association; Frank G. Dickinson, Ph. D., director of the AMA's Bureau of Medical Economic Research; and Edwin J. Faulkner, president of the Woodmen Accident and Life Company.

The semi-annual meeting of the Executive Council was held the next day with Dr. F. J. L. Blasingame, Wharton, President, presiding, and reports from most Association committees. Some of the items presented for consideration follow:

Trustees.—A budget for 1955 has been adopted, and the Association is in a sound financial condition. The balance yet to be paid on the headquarters building is $242,927.87. Mortgage payments will be made from the building fund, and repayments on moneys borrowed for the building will be made from the building fund to the medical defense and general funds as dues payments permit.

Councilors.—The Board of Councilors had no business to submit to the Executive Council.

American Medical Association House of Delegates.—The Texas delegation to the American Medical Association House of Delegates reviewed some of its activities and encouraged all Texas doctors to attend the next AMA meeting and visit the House.

Medical Jurisprudence.—Proposed legislation to transfer state tuberculosis hospitals from the jurisdiction of the Board for State Hospitals and Special Schools to the State Health Department was explained to the Councils on Medical Jurisprudence and on Medical Education and Hospitals and to the Committees on Tuberculosis and on Public Health by a representative from the Legislative Budget Board. These committees were directed by the Executive Council to study the problem further and recommend action to the Council on Medical Jurisprudence. The Council on Medical Jurisprudence has approved the idea of a medical examiner system for Texas as proposed by the Texas Society of Pathologists; has taken no action on a proposed bill to license physical therapists pending submission of the bill itself; has opposed licensing of medical technicians; has endorsed a bill to license opticians; has agreed not to support a bill for licensing hospitals sponsored by the Texas Osteopathic Association; has offered support to the state medical schools, Board for Hospitals and Special Schools, and Health Department in their requests for appropriations; and has approved support of a bill to remove professional liability insurance from the single rating law. The council has opposed reinsurance of health plans, extension of the

doctor draft, and the Wolverton mortgage loan bill on the national level.

Scientific Work.—Information about the 1955 annual session was presented and approval of the dates of April 21-25 for the 1956 session in Galveston was requested. The Executive Council approved this recommendation.

Medical Economics.—The Physicians Placement Service since January 1, 1954, has attempted to help 674 physicians find locations (of these, 146 began practice in Texas) and 152 towns to find doctors (71 places were filled). A questionnaire survey on insurance carried by Texas schools has been conducted, and brochures explaining the points to look for in accident and health insurance—one for the doctor and another for him to give to his patients—are being prepared.

Medical Education and Hospitals.—The Board of Councilors was requested to make note of the failure of some hospitals to maintain the standards they promised to uphold when accepting Hill-Burton funds, the fault partially of local physicians, the Council on Medical Education and Hospitals believes. The council approved a proposal for state appropriations to care for tuberculous children but would not endorse a plan for a scholarship fund for premedical students to be raised by gifts from Texas physicians under sponsorship of a national premedical fraternity.

Public Relations.—Among other projects, a manual for county medical societies outlining the services of the central office, listing state and national legislative representatives, containing a check-off list on valuable public relations activities, and providing other handy information for local officers has been prepared. At least one manual should be in each county medical society and may be obtained upon request to the central office. Public relations manuals published by the American Medical Association have been provided to county medical society public relations chairmen; a limited supply remains for distribution to societies which have no public relations chairmen or which failed to obtain a copy.

Tuberculosis.—The Committee on Tuberculosis has endorsed proposed legislation calling for an appropriation of $7 per patient per day for care in state tuberculosis hospitals and other legislation providing for appropriation of state funds to care for tuberculous children in hospitals owned privately or by local governmental units. Also approved was the Texas Tuberculosis Association "Searchlight on TB" survey. The committee has recommended at least one program on tuberculosis each year by every county medical society.

Mental Health.—The committee is working in the fields of alcoholism and retarded children, is endeavoring to encourage the best possible care for mental patients through the State Board for Hospitals and Special Schools, and is cooperating closely with the Committee on Mental Health of the Woman's Auxiliary.

Public Health.—A variety of resolutions dealing with legislation proposed by the State Health Department and dealing with such subjects as air pollution, food handlers, merger of city and county health services, and rabies control were submitted to the Executive Council by the Committee on Public Health. Most of them were approved in general intent but were referred for action to the Council on Medical Jurisprudence. Endorsement of a program of recruiting inactive reservists for the United States Public Health Service was given, and action on a resolution endorsing fluoridation of public water supplies (referred to the Committee on Public Health by the House of Delegates last April) was deferred until the House of Delegates meets in April.

Blood Banks.—A report on the program of the Texas Association of Blood Banks and the establishment by that organization of a blood bank clearing house was presented.

Rural Health and Doctor Distribution.—Doctor distribution surveys have been completed in Districts 7, 8, and 4, and a survey currently is under way in District 5. Requests coming to the Physicians Placement Service continue to be primarily for and from general practitioners. There have been 131 hospitals built in Texas with aid through the Hill-Burton act with an additional 6 approved but not completed; of these, 60 are in rural areas. Aubrey Gates, secretary of the AMA Council on Rural Health, met with the Committee on Rural Health and Doctor Distribution.

Constitution and By-Laws.—The Committee on Revision of the Constitution and By-Laws expects to return to the House of Delegates without recommendation a resolution calling for deletion of the word "white" as a prerequisite for membership in the Texas Medical Association. The committee will recommend that no change be made in the classifications of membership, a proposal referred to the committee for study. The committee will propose that a Council on Constitution and By-Laws be created.

Nursing Care.—A report of the workshop on nursing sponsored by the Texas Joint Commission for Improvement of Care of the Patient was given, together with a suggestion that the recommendations coming from that group be supported (December, 1954, JOURNAL, pages 824-825). The Committee on Nursing Care called for arrangements to permit nursing students whose training was interrupted to return to training; establishment of group nursing as opposed to individual private duty nursing where possible; creation of nurse recruitment teams consisting of a doctor, a member of the medical auxiliary, and a nurse educator to visit high schools; increased efforts to interest women in vocational nursing and attempts to persuade nursing schools to give credit for training of qualified students as vocational nurses; and modification of didactic programs in nursing schools to provide more time for intimate experience in patient care.

Negro Medical Facilities.—Some statistics relating to educational and hospital facilities available in Texas to Negro physicians and nurses were presented. The Committee on Negro Medical Facilities expects to compile additional figures.

National Emergency Medical Service.—The Texas Medical Association has been requested to make a drive for local organization and training for first aid and for ambulance and hospital service for use in emergencies.

American Medical Education Foundation.—Plans are to concentrate the 1955 drive for funds for the American Medical Education Foundation in Texas to the period from April 1 till the annual session later that month. The goal for the year is $95,000 with a contribution from each member of the Association. John Hedback, associate executive secretary of the fund, was in Austin to meet with the committee at the time of the Executive Council meeting.

Health Costs.—A committee with representatives from the Texas Medical Association and the Texas Hospital Association is beginning to accumulate statistics on hospital operations with special reference to cost and also on the relative cost of insured and noninsured patients.

Workmen's Compensation Insurance Companies.—Rules of arbitration for use in case of disagreement between physicians and insurance companies writing workmen's compensation insurance were submitted to the Executive Council and referred for study to the Board of Councilors.

Maternal Mortality.—The Committee on Maternal Mortality, created at the 1954 annual session by action of the

House of Delegates, is organizing its attack on maternal mortality and expects to begin shortly to receive from the State Health Department reports of maternal deaths for investigation. The committee expects to be able to determine where teaching and care relating to expectant mothers needs to be improved.

Advisory Committee to the President.—Dr. Blasingame reported that the advisory committee consisting of certain other officers, council and committee chairmen, and the President of the Woman's Auxiliary and functioning for the first time during his administration has served admirably as a sounding board and as a means for exchange of information and coordination.

Executive Secretary.—Membership in the Texas Medical Association for 1954 numbered 6,974, with 6,060 Texas physicians belonging also to the American Medical Association. During 1954 the Library of the Association filled 2,104 requests, a 25 per cent increase over the previous year and a 118 per cent increase over 1951. Visits by central office staff members and state officials to county societies have totaled 66 since the spring of 1954. Brochures on attendance and program problems for use of county medical societies have been prepared and distributed. Formal personnel policies for members of the central office staff have been acted on favorably by the Board of Trustees.

Woman's Auxiliary.—Mrs. Mark H. Latimer, Houston, President of the Woman's Auxiliary to the Texas Medical Association, spoke briefly to the Executive Council, pointing out that the Auxiliary program this year has concentrated on public relations, legislation, and nurse recruitment.

ANNUAL REPORTS OF OFFICERS AND COMMITTEES DUE

Officers and chairmen of all Texas Medical Association committees are expected to file annual reports with the Executive Secretary no later than February 25 to accord with Section 23, Chapter VIII of the By-Laws. To expedite publication of the reports in a pamphlet for distribution to members of the House of Delegates a month prior to the annual session, a procedure also required by the By-Laws, officers and committee chairmen have been asked to supply reports earlier than the deadline date if possible. Supplementary reports covering action between February and the time of the annual session can be filed in typewritten form when the House of Delegates convenes. Six copies of typewritten reports should be available when the reports are submitted.

COUNTY SOCIETIES

Bexar County Society

December 14, 1954

The Bexar County Medical Society heard F. J. L. Blasingame, Wharton, President of the Texas Medical Association, speak at the December 14 meeting in San Antonio.

Officers installed at the dinner meeting were Robert F. Gossett, president; John L. Matthews, president-elect; John B. Case, vice-president; Thomas H. Diseker, secretary; J. W. Palmer, treasurer; Milton Davis, trustee; Edwin Mueller, board of censors. All of the officers are from San Antonio. Dr. Blasingame spoke not only to members of the society but to visiting guests from the Army and Air Force hospitals as well as some of San Antonio's lay leaders.

Cameron-Willacy Counties Society

December 20, 1954

(Reported by J. C. George, President)

The Cameron-Willacy Counties Medical Society met on December 20 in Matamores, Mexico, with members of the woman's auxiliary present for a dinner and entertainment.

The following officers were elected for 1955: John T. Hartman, Harlingen, president; Pierre P. Poole, Brownsville, vice-president; Howard E. Tewell, Jr., Harlingen, secretary-treasurer. James Y. Clarke, Harlingen, alternate delegate; and Joe Louis Moet, La Feria, board of censors.

Cherokee County Society

December 28, 1954

Common Tumors of Skin—J. B. Howell, Dallas.

The Cherokee County Medical Society met on December 28 in Rusk and heard the above scientific paper by Dr. Howell. Officers elected at the meeting were Harbert Davenport, Jacksonville, president; Walter R. Townsend, Rusk, vice-president; Thomas H. Cobble, Rusk, secretary-treasurer; George M. Hilliard, Jacksonville, delegate; L. L. Travis and John C. Rucker, both of Jacksonville, alternate delegates.

Colorado-Fayette Counties Society

November 9, 1954

The Colorado-Fayette Counties Medical Society met in Shiner on November 9. Fourteen members attended the dinner meeting, after which medical and surgical case reports were presented by J. C. Guenther, La Grange, and C. T. Dufner, Hallettsville.

Dr. Guenther was elected president and D. M. Shelby, Gonzales, secretary.

Dallas County Society

Ridings E. Lee, Dallas, was made president of the Dallas County Medical Society after the resignation of R. A. Trumbull, Dallas, because of ill health.

Reeves-Ward-Winkler-Loving-Culberson-Hudspeth Counties Society

December 16, 1954

The Reeves-Ward-Winkler-Loving-Culberson-Hudspeth Counties Medical Society met on December 16 at Kermit for a dinner with the woman's auxiliary and to elect officers. Rufus Roberts, Pecos, is the new president; Bennett A. Wight, Kermit, was elected vice-president; and Harlow F. Avery, Pecos, is the new secretary.

DISTRICT SOCIETIES

Ninth District Society

March 17, 1955

X-Ray Diagnosis of the Aging Gastrointestinal Tract—Vincent P. Collins, Houston.
Management of Hypertension, 1955—Hugh H. Hanson, Houston.
The Current Status of Gamma Globulin—Russell J. Blattner, Houston.
Office Treatment in Gynecology—Denton Kerr, Houston.
Uses of Some of the Unusual Antibiotics—Ellard M. Yow, Houston.
The Right Lower Quadrant: Acute Diseases—Robert M. Moore, Galveston.

The Ninth District Medical Society will meet at the Jesse H. Jones Library Building in Houston on March 17. After the above outlined scientific program there will be a business meeting, a fellowship hour, and a dinner in the Doctor's Club. F. J. L. Blasingame, President of the Texas Medical Association, will speak on "What District Medical Societies Are For" at the dinner, after which music will be played for a St. Patrick's Day dance until 10:30 p. m.

Registration will begin at 9:00 a. m. for both the society and the woman's auxiliary; an orientation tour of the Texas Medical Center will be at 9:30; and conducted tours of the M. D. Anderson Hospital for Cancer Research and the Baylor University College of Medicine will be offered from 10:00 to 12:30, with the scientific program beginning at 1:00.

Refresher Course Faculty

FRANK N. ALLAN,
M. D.,
Boston.
Executive Director,
Medical Department,
Lahey Clinic.

JOHN A. ANDERSON,
M. D., Ph. D.,
Minneapolis.
Professor of Pediatrics,
University of
Minnesota.

WILLIAM H. BICKEL,
M. D., F.A.C.S.,
Rochester.
Consultant, Orthopedic
Surgery, Mayo Clinic.

A. WAITE BOHNE,
M. D.,
Detroit.
Surgeon-in-Charge,
Division of Urology,
Henry Ford Hospital.

FRANCIS J. BRACELAND, M. D.,
Sc. D., F.A.C.P.,
Hartford.
Psychiatrist-in-Chief,
Institute of Living.

ALEXANDER
BRUNSCHWIG, M. D.,
New York.
Attending Surgeon and
Chief, Gynecological
Department, Memorial
Center for Cancer and
Allied Diseases.

STANLEY H. DURLACHER,
M. D.,
New Orleans.
Pathologist-in-Chief
and Toxicologist,
Coroner's office,
Parish of Orleans.

WALTER A. FANSLER,
M. D., F.A.C.S.,
Minneapolis.
Clinical Professor of
Surgery, Head of
Division of Proctology,
University of
Minnesota.

RUSSELL S. FISHER,
M. D., F.C.A.P.,
Baltimore.
Chief Medical Examiner, State of
Maryland.

NORMAN E. FREEMAN,
M. D.,
San Francisco.
Associate Clinical
Professor of Surgery,
University of California.

TEXAS MEDICAL ASSOCIATION

ANNUAL
SESSION
APRIL 24 - 27
Ft. Worth

WILLIAM J. KERR, M. D., F.A.C.P., San Francisco. Formerly Professor of Medicine and Chairman of Division of Medicine, University of California.

C. FERD LEHMANN, M. D., San Antonio. Consultant in Dermatology, Brooke Army Hospital.

FRANK R. LOCK, M. D., F.A.C.S., Winston-Salem. Professor of Obstetrics and Gynecology, Bowman Gray School of Medicine.

JOHN S. LUNDY, M. D., Rochester. Senior Consultant, Section on Anesthesiology, Mayo Clinic.

JESS NEELY, Houston. Head Football Coach and Athletic Director, Rice Institute.

CLAIR M. KOS, M. D., F.A.C.S., Iowa City. Professor of Otolaryngology and Maxillofacial Surgery, State University of Iowa.

LUCIAN A. SMITH, M. D., Rochester. Consultant in Internal Medicine, Mayo Clinic.

EDWARD T. SMITH, M. D., F.A.C.S., Houston. Clinical Professor of Orthopaedic Surgery, Baylor University College of Medicine.

ROBERT L. SANDERS, M. D., Memphis. Senior Surgeon, Baptist Memorial Hospital; President, Southern Medical Association.

LESTER W. PAUL, M. D., F.A.C.R., Madison. Professor of Radiology, University of Wisconsin.

ALTON OCHSNER, M. D., F.A.C.S., F.A.C.C.P., New Orleans. William Henderson Professor of Surgery and Chairman of Department, Tulane University School of Medicine.

EDDIE WOJECKI, Houston. Football Trainer, Rice Institute.

Refresher Course Registration Opens

For the first time the Texas Medical Association will present a refresher course program at its annual session. Twenty-five refresher courses, each consisting of an hour of lecture by an outstanding national medical leader plus a half hour of questions and answers, are being offered. Primarily for the benefit of physicians doing general practice but also of value to specialists, the courses, like the rest of the scientific program at the annual session, will be granted informal, hour-for-hour credit by the Texas Academy of General Practice. Courses are scheduled for 8:15 to 9:45 a. m., Monday through Wednesday, April 25-27, and a physician may register for as many as three courses, one each day. Attendance is limited to fifty for each course, with admission only by ticket, for which there is no charge.

Only members of the Texas Medical Association will be registered for the courses until April 19, at which time other requests will be considered. After April 19, applications received from residents and interns who are not members of the Association will be filled as tickets are available. Applications from members will be filled in the order they are received. If first choice courses are full, efforts will be made to send tickets for second or third choices designated by the applicant. If a physician who has registered for any of the courses finds that he will be unable to attend, he should return his tickets to the central office immediately so as to allow others to attend in his place. For convenience, a postage-paid order card for the refresher courses, as well as a request for hotel accommodations, is included in this issue of the JOURNAL.

Tickets for which applications were received after April 19 and any not yet reserved at the time of the meeting will be available at the Association's information desk in the lobby of Hotel Texas all day Sunday, April 24, and in the Longhorn Room of Hotel Texas after 10:30 a. m. Monday and Tuesday. From 7:30 to 10:30 a. m. Monday, Tuesday, and Wednesday any extra tickets may be obtained on the third floor of Hotel Texas, where all refresher courses will be held except for a special course to be presented at St. Joseph's Hospital. Syllabuses prepared by the faculty of the courses will be distributed at the sessions.

In applying for registration, please note the name of the speaker, the title of the discussion, and the course number, giving first, second, and third choices.

All inquiries about refresher courses prior to April 19 should be addressed to Refresher Courses, Texas Medical Association, 1801 North Lamar Boulevard, Austin; after that date, to Refresher Courses, Texas Medical Association, Hotel Texas, Fort Worth.

A list of the courses along with a summary of each follows.

MONDAY, APRIL 25

Third Floor, Hotel Texas

8:15 a. m. to 9:45 a. m.

M-1 *Headaches and Dizziness.* FRANK N. ALLAN, Boston.

M-2 *Diagnosis of Growth Disorders.*
JOHN A. ANDERSON, Minneapolis.

This course will review a large number of growth disorders in infants and children to bring out the fundamental mechanisms by which growth is suppressed or accelerated. The value of certain laboratory tests, the application of newer hormonal assay techniques, and the use of longitudinal growth curves as an aid to diagnosis and therapy will be discussed. An evaluation of the present status of "growth hormone" in both man and animals will be reviewed.

M-3 *Treatment of Common Fractures of the Upper Extremities.* WILLIAM H. BICKEL, Rochester.

An attempt will be made to review some of the more common fractures of the upper extremities and emphasize some of the tried and trusted older methods of treating fractures, which have proved satisfactory in the past. There will be a discussion and evaluation of some of the more recent developments in fracture treatment, which may or may not have a lasting value.

M-4 *Management of the Psychiatric Patient by the General Practitioner.* FRANCES J. BRACELAND, Hartford.

With the epidemics and acute illnesses of the past under reasonable control, the practitioner now is faced with chronic diseases and emotional disorders. Anxiety states and mild depressions could be taken care of very well in general practice. Some of the emotional disorders of middle life belong in the hands of the practitioner because he knows the patient and the patient trusts him. A discussion of these illnesses will be undertaken in addition to some consideration of the emotional problems of the older age group.

M-5 *Hemorrhoids and Fissures.*
WALTER A. FANSLER, Minneapolis.

It is necessary to determine whether the patient has internal, anal, or external hemorrhoids or a combination and to determine the degree of redundancy of the rectal mucosa. Treatment includes medical and palliative measures, care of acute complications, injection methods, and radical surgical removal. Anal fissure must be differentiated from conditions of specific origin and from mere cracks. True anal ulcers usually are infected tears produced by passage of large hard stools or the results from infection in a crypt of Morgagni. Permanent cure almost always requires surgery.

M-6 *Treatment of Abnormal Cardiac Mechanisms.*
WILLIAM J. KERR, San Francisco.

The abnormal cardiac mechanisms are frequently the precipitating causes of symptoms, both in the structurally sound and in the diseased heart. Their recognition is imperative and is the basis of sound therapy. Habitual sinus arrhythmia, bradycardia, and tachycardia require no treatment, but if they are of recent origin, the background of disease which promotes or aggravates them should be investigated. Ectopic beats, paroxysmal or persistent auricular tachycardia, and flutter or fibrillation may require special attention.

M-7 *Prevention of Anesthesia Deaths.*
JOHN S. LUNDY, Rochester.

The use and abuse of the commonly used anesthetic agents and methods will be covered. Consideration will be given to various age groups, the more common operations performed, the supportive therapy that the instructor believes makes anesthesia and operation safer today, fire and explosion hazards, and also the meaning of "O.K. for Anesthesia" by the medical consultant. Questions may be asked at any time to permit the course to cover special items of interest.

M-8 *Early Recognition and Treatment of Cancer of the Stomach.* ALTON OCHSNER, New Orleans.

Results from treatment of cancer of the stomach, one of the most frequent cancers in man since prehistoric times, are not much better today than they were twenty-five years ago. It is the instructor's firm belief that although radical surgery is necessary to cure cancer, total gastrectomy is not necessary in all gastric cancer cases. Lesions not clinically diagnosible as cancer must be treated as if they were cancer.

M-9 *Essentials of Interpretation of Chest Roentgenograms—the Normal Chest.*
LESTER W. PAUL, Madison.

The course will attempt to lay a foundation of the basic principles upon which roentgen interpretation of chest disease can be established. This period will deal, in the main, with the normal chest and its variations, with some attention given to the early changes caused by disease. Among the subjects to be covered will be the roentgen anatomy of the mediastinum and the pulmonary apex, the structure of the hilum shadows, and the recognition of early lymph node enlargements.

TUESDAY, APRIL 26

Third Floor, Hotel Texas

8:15 a. m. to 9:45 a. m.

T-11 *Treatment of Common Fractures of the Lower Extremities.* WILLIAM H. BICKEL, Rochester.

The more common fractures of the lower extremities will be reviewed and the most satisfactory older methods of treatment emphasized. The more recent developments in fracture treatment, which may or may not have a lasting value, will be discussed and evaluated.

T-12 *What Can Be Done for Cancer of the Cervix That Has Failed to Be Controlled by Radiation Therapy.* ALEXANDER BRUNSCHWIG, New York.

The present standard treatment for cancer of the cervix is irradiation therapy. While cures are effected by such treatment, the majority of patients eventually die of their cancers. Radical surgery has something to offer these patients. The type of surgery indicated depends upon the extent of the recurrence, and in any event, the patient still may have a chance for cure, as shown by actual experience. This experience will be reviewed.

T-13 *Malpractice Suits and How They Arise.* RUSSELL S. FISHER, Baltimore, and STANLEY H. DURLACHER, New Orleans.

Malpractice suits have become approximately ten times as frequent today as twenty years ago. A large part of the increase is due to a far greater tendency of the unhappy patient to sue the physician in the hope of obtaining some settlement even though the case is not one of demonstrated negligence. The evidence indicates that better medicine is being practiced today than ever before; yet, the physician must be constantly on guard for suits.

T-14 *Varicose Veins and Varicose Ulcers.* NORMAN E. FREEMAN, San Francisco.

This course will consist of a brief review of the fundamental factors concerned with the return of venous blood and lymph from the lower extremities. Etiologic factors in the development of varicose veins and postphlebitic or stasis ulcers will be discussed. The general principles of treatment, operative and nonoperative, will be illustrated by specific examples. Particular attention will be paid to the hazards involved in the surgery of varicose veins and ulcers.

T-15 *Relation of Adenoids and Sinusitis to Otologic Disease.* CLAIR M. KOS, Iowa City.

Positioned in the nasopharynx at the crossroads of the nasal, paranasal, and pharyngeal systems, the adenoids may influence the function of the ear either directly or indirectly. The types of ear disease that invite attention to the nasopharynx and the paranasal sinuses and that respond promptly to appropriate treatment need to be compared and assessed with those which continue to smolder and flare up despite the removal of the initial source.

T-16 *Hormonal Therapy During Functional Years.* FRANK R. LOCK, Winston-Salem.

A period of enthusiasm over the apparent effect of various hormonal agents led to their widespread use in a variety of conditions. The experience with hormonal therapy has resulted in a crystallization of the knowledge of those conditions in which it is of real value and an appreciation of the specific plans of therapy which must be followed to provide the best results. The course will cover pubertal bleeding, dysmenorrhea, infertility, amenorrhea, dysfunctional bleeding, and hypo-ovarianism.

T-17 *Essentials of Interpretation of Chest Roentgenograms—the Abnormal Chest.* LESTER W. PAUL, Madison.

This period will consist of a discussion of the abnormal chest with particular reference to basic pathologic processes. Included will be a discussion of diseases causing generalized changes in the lungs, the roentgen patterns of pulmonary congestion and edema, and the recognition of early pulmonary edema. The lecture will be illustrated with examples of a wide variety of diseases to show how they alter the normal anatomic shadows of the lungs, pleurae, and mediastinum.

T-18 *Anatomy of Abdominal Pain.* LUCIAN A. SMITH, Rochester.

The purpose of this review is to establish the concept of two pathways in the interpretation of abdominal pain. The histology; neuroanatomy; and gross, sectional, and quadrant anatomy will be reviewed from the practical viewpoint of their application not only to the transmission of pain but also to the interpretation of pain patterns set up by various lesions within the abdomen.

TUESDAY, APRIL 26

Staff Room, St. Joseph's Hospital

8:15 a. m. to 9:45 a. m.

T-19 *Use of the Symballophone in the Study of Abnormal Sounds in the Body.* WILLIAM J. KERR, San Francisco.

The symballophone is a double stethoscope designed so sounds can be conveyed to the two ears separately. Thus two points under study can be compared for differences in time, intensity of sound, and other qualities. One may also determine the direction a sound is traveling and its point of origin. Sounds in joints, muscles, stomach, or large bowel may be useful in diagnosis.

WEDNESDAY, APRIL 27

Third Floor, Hotel Texas

8:15 a. m. to 9:45 a. m.

W-21 *Pediatric Urologic Problems.* A. WAITE BOHNE, Detroit.

Failure of the infant to gain and develop within expected norms usually can be traced to a defect in one of the major systems. When the urinary system is the root of the trouble, congenital anomalies are most often the underlying cause. Infections, even of a minor nature, should never be regarded lightly. They are found more frequently in the young girl. Early, accurate diagnosis in all pediatric urology may prevent irreparable damage.

W-22 *Legal Obligations of the Physician to His Patient.* RUSSELL S. FISHER, Baltimore, and STANLEY H. DURLACHER, New Orleans.

Elements concerned in establishment of the physician-patient contract, obligations and duties of the physician once such a relationship is established, and methods of termination of the physician-patient contract will be covered. Duties dictated by statutory law as well as those established under common law will be elucidated. Subjects discussed will include the duty of diagnosis, care, and disclosure; privileged communications; dying declarations; and various duties imposed under licensure and public health laws.

W-23 *Treatment of Common Skin Disorders.* C. FERD LEHMANN, San Antonio.

Treatment of verrucae, acne, and hand eruptions will be covered in this course. The discussion of verrucae will be divided into classification, description, and treatment. Acne will be discussed according to classification, various influences, therapeutic agents and rationale of each, and a list of prescriptions. The etiologic factors in hand eruptions, including irritants and infections, will be brought out.

W-24 *Menopause and Menopausal Syndrome.* FRANK R. LOCK, Winston-Salem.

The experience with hormonal therapy has resulted in a crystallization of the knowledge of those conditions in which it is of real value and an appreciation of the specific plans of therapy which must be followed to provide the best results. Specific diagnosis of the menopausal syndrome and a concept of its proper treatment will be discussed.

W-25 *Intestinal Obstruction.* ROBERT L. SANDERS, Memphis.

The physician should think of bowel obstruction when the patient complains of abdominal pain, nausea, vomiting, and distention. He should look for visible peristalsis and use the stethoscope freely over the abdomen. In addition, history and roentgen studies are important in diagnosis. Also important are decisions about location of obstruction; its completeness; whether it is simple, mechanical, or strangulated; and fluid and blood chemistry balance. Medical measures, suction, anesthesia, operative skill, and postoperative treatment must be considered in therapy.

W-26 *Abdominal Pain as a Tool in Diagnosis.* LUCIAN A. SMITH, Rochester.

This portion of the refresher course will consider the application of the principles of the two pathway transmission of pain in the diagnosis of specific abdominal lesions from a clinical viewpoint. The interpretation of pain patterns and pain shifts will be considered in detail.

W-27 *Athletic Injuries.*

EDWARD T. SMITH, MR. JESS NEELY, and MR. EDDIE WOJECKI, Houston.

Primarily an informal session, the course will emphasize various methods of preventing accidents in talks by a coach, trainer, and physician. Subjects to be covered will include physical condition of the athlete, equipment, and coaching technique. Various injuries which are encountered in athletics will be taken up and briefly discussed from the standpoint of prevention and treatment.

Hotel Space Available

Fort Worth hotels and motels cooperating with the Texas Medical Association to assure adequate housing for the annual session April 24-27, together with their addresses and beginning rates, follow:

Century Motel, 3434 E. Lancaster, $5.
Coates Hotel Apts., 611 W. 4th, $4.50.
Fayette Hotel, 615 W. 3rd.
Fortune Arms, 200 Burnet, $7.50.
Hickman Hotel, 515 W. 5th, $2.50.
Hilton Hotel, 601 Main, $4.50.
Ivanhoe Hotel, 709 W. 3rd, $2.50.
Loring Hotel, 3101 Camp Bowie, $4.
Park Plaza Motel, 1815 E. Lancaster, $4.50.
Texas Hotel, 815 Main, $4.
Town and Country Motel, 3520 Camp Bowie, $5.
Town House, 600 W. 3rd, $3.50.
Westbrook Hotel, 408 Main, $2.50.
Western Hills Hotel, 6451 Camp Bowie, $5.75.
Westmoor Courts, 5800 Camp Bowie, $5.
Worth Hotel, 310 W. 7th, $4.

Requests for reservations may go directly to the hotel of choice or to the chairman of the Hotels Committee, Dr. Ray V. Brasher, 1008 W. Petersmith, Fort Worth. Applications for reservations should include the type and number of accommodations desired, the date and hour of arrival and departure, the relation to the Association or Auxiliary of the person sending the application, and the names and addresses of all persons who will occupy the rooms requested. No deposit is being required, but it is expected that all persons who later find it impossible to attend the annual session will cancel their reservations promptly.

A postage-paid, tear-out postal card elsewhere in this issue of the JOURNAL may be used for requesting accommodations.

AUXILIARY SECTION

COUNTY AUXILIARIES

Christmas parties honoring the doctors took the foreground at December auxiliary meetings over the state. More than 200 guests attended the annual Christmas open house given by the *Nueces County Auxiliary* December 10 at the home of Dr. and Mrs. Paul B. Guttman, Corpus Christi. Among those present were hospital resident physicians and members of the medical staff of the local United States Naval Hospital. Doctors of Sulphur Springs were honored by their wives at the annual Christmas dinner of the *Hopkins-Franklin Counties Auxiliary,* and as part of the program Dr. Ben D. Wood presented color motion pictures taken while he was in the service stationed in the South Pacific.

The home of Dr. and Mrs. Hjalmar Sybilrud of Pharr was the scene of the business meeting in December of the *Hidalgo-Starr Counties Auxiliary,* after which the doctors joined the group for a Christmas party. Dr. and Mrs. Henry Harrison, Bryan, were hosts for the Christmas party for members of the *Brazos-Robertson Counties Auxiliary* and the medical society, and *Hunt-Rockwall-Rains-Delta Counties Auxiliary* entertained the doctors on December 7 in Greenville with an annual Christmas banquet. An annual dinner was given for *Henderson County Auxiliary* in December at the home of Dr. and Mrs. Melvin R. Wilcox, Jr., Athens.

Christmas gifts were distributed to persons living in two homes for the aged in Corsicana by the *Navarro County Auxiliary.* The group had as its guests January 7 two school nurses, and Mrs. Will Miller reviewed "Jane Long" by Anne Ammons Brindley at the meeting in the Bernard Rosen home in Corsicana. An x-ray survey was sponsored by the auxiliary January 25-February 5, and a civil defense program was presented in November by Embry Ferguson and Joe K. Garner, with the subject being biological warfare.

To raise money for its nurse recruitment program, the *Tarrant County Auxiliary* will present a variety show on March 26 at the Fort Worth Academy of Medicine Building, Fort Worth. Last year's show netted more than $500. Mrs. Claude Williams is chairman.

Brazoria County Auxiliary sponsored a benefit bridge party December 10 in Angleton to raise funds for nursing scholarships. Fifty guests attended, and door prizes donated by Angleton and Alvin druggists were presented at the party, for which Mrs. Wayne Steele, Angleton, was chairman.

Galveston County Auxiliary gave a reception at the Rebecca Sealy Nursing Home in Galveston November 16, with members of the Medical Dames and women students of the University of Texas Medical Branch as honor guests, along with Mrs. Thomas Vanzant, Mrs. Walter Ford, and Mrs. Otis P. Flynt, officers of the *Harris County Auxiliary;* Mrs. Mason Guest, president-elect of the Faculty Club of the Medical Branch; and Mrs. Morris Pollard, Medical Dames sponsor. A panel discussion on "How to Be a Doctor's Wife" was presented by Mrs. John W. Middleton, Galveston, and her committee. Approximately 200 attended.

Borger will be the scene of the District 3 meeting of the Woman's Auxiliary in April, it was announced at the November 10 meeting of the wives of Hutchinson County physicians in the home of Dr. and Mrs. W. G. Stephens, Borger. Committees were appointed for the affair November 16 in Borger at the *Gray-Wheeler-Hansford-Hemphill-Lipscomb-Roberts-Ochiltree-Hutchinson-Carson Counties Auxiliary* meeting.

Dr. F. J. L. Blasingame, Wharton, President of the Texas Medical Association, was guest speaker at the public relations day luncheon sponsored by the *Jefferson County Auxiliary* November 9 in Beaumont.

Mrs. Mark Latimer, Houston, State President of the Woman's Auxiliary, has been a guest of several auxiliaries in recent months. She and Mrs. Andrew Magliolo, Dickinson, council woman of District 8, attended the December 29 meeting of the *Victoria-Calhoun-Goliad Counties Auxiliary* in Victoria. Mrs. John H. Wootters, Houston, state chairman of the Historical Committee, accompanied Mrs. Latimer to the meeting in Lufkin on November 30 of the *Angelina County Auxiliary. Bell County Auxiliary* heard a message from Mrs. Latimer on November 12 in Temple, and Mrs. John Draker, Austin, state executive secretary, and Mrs. Paul Burow, Killeen, state legislative chairman, also attended.

Mrs. Latimer more recently was honored by Delta Zeta sorority at a dinner and reception in Dallas, February 2, while she was there to speak to the *Dallas County Auxiliary* at which Mrs. Emmett Essin, Sherman, council woman

of District 14, and county society presidents in District 14 were guests.

The City Council of Beta Sigma Phi, El Paso, gave a luncheon in honor of Mrs. George Turner, El Paso, on January 15. Mrs. Turner was selected by the group as 1955 First Lady of El Paso; other auxiliary members who have been so honored in previous years are Mrs. W. W. Schuessler and Mrs. Louis W. Breck. Mrs. Turner and Mrs. E. W. Coyle, San Antonio, were both honored as woman of the week by their local newspapers during December. Mrs. B. H. Passmore, San Antonio, was selected by a San Antonio newspaper on January 21 as club woman of the year in San Antonio.

DISTRICT AUXILIARIES

Twelfth District Auxiliary

The Woman's Auxiliary to the Twelfth District Medical Society met in Marlin at the Veterans Administration Hospital on January 11. Newly-elected officers of the group are Mrs. Charles Cornwell, Marlin, president; Mrs. Charles Richardson, Bryan, vice-president; Mrs. Paul Mitchell, Corsicana, secretary; and Mrs. R. R. White, Temple, press reporter.

After the election of officers, Mrs. G. V. Brindley, Sr., Temple, showed colored movies taken on her recent trip to Europe.

The auxiliary and the society had luncheon together in the Falls Hotel and heard Chauncey D. Leake, Ph. D., vice-president and dean of the University of Texas Medical Branch, Galveston, speak on tissue culture. The luncheon was followed by an informal social hour in the home of Dr. and Mrs. Charles Cornwell.

Conference for Future Nurse Clubs

The first conference for the Future Nurse Clubs in Texas will be held on March 26 at the Jesse H. Jones Library Building, Houston. This conference is open to all members of Future Nurse Clubs, and each club may have three official delegates, only one of which may be a senior in high school; sponsors and nurse recruitment chairmen are invited. Sponsored by the Texas Graduate Nurses' Association, the Texas League for Nursing, and the Woman's Auxiliary to the Texas Medical Association, the sponsoring groups hope that the conference will strengthen Future Nurse Clubs in Texas.

After registration, from 9 to 10 a. m., the program tentatively will include a business session with the election of officers, a luncheon with a guest speaker, a style show giving types of nurses' uniforms, and a panel discussion with some of the members on the panel.

Luncheon reservations should be sent to Mrs. W. D. Nicholson, 1111 West Sixth, Freeport, by March 21. This luncheon, to be held in the Jesse H. Jones Library Building, will cost $1.65. The guest house at the University of Houston will have room for about fifty visitors, and reservations may be made there by writing to Mrs. S. E. Shomer, Director of Housing, University of Houston. Rates are $2.50.

DEATHS

P. BRINDLEY

Dr. Paul Brindley, Galveston, Texas, professor and for twenty-nine years head of the Department of Pathology of the University of Texas School of Medicine, died unexpectedly December 28, 1954, at his home of a heart ailment for which he had been treated in recent months.

Born December 27, 1896, in Maypearl, Dr. Brindley was the son of George Goldthwaite and Mattie (Hanes) Brindley. He was graduated from the University of Texas in Austin in 1923 and received his degree in medicine from the Medical Branch in Galveston in 1925. He had continued to be associated with his alma mater, first being instructor in pathology and working up to the head of the Department of Pathology at the Medical Branch. Dr. Brindley also had done postgraduate work in the Mallory Laboratory at Boston.

A member throughout his career of the Galveston County Medical Society and the Texas and American Medical Associations, Dr. Brindley was president of the county group in 1940, secretary of the Section on Pathology of the state organization in 1931 and 1935, and chairman of the section in 1942. He was president two years of the Texas Society of Pathologists, a fellow of the College of American Pathologists and the American College of Physicians, and a member of the American Society of Clinical 'Pathologists, American Association of Pathology and Bacteriology, American Association for the Advancement of Science, International Association of Medical Museums, and International Association of Geographic Pathologists. He also was a member of Alpha Omega Alpha medical fraternity. Dr. Brindley was credited with establishment of the Galveston County unit of the American Cancer Society, and after serving three terms as chairman, he was named honorary chairman and a member of the board of directors. He was consultant pathologist for the United States Public Health Service Hospital, Galveston, and Lackland Air Force Base, San Antonio.

A recognized scholar, Dr. Brindley was due to receive

DR. PAUL BRINDLEY

An obituary ordinarily will not be published more than four months after date of death. Cooperation in reporting deaths of physicians and in furnishing appropriate biographical material promptly is solicited.

in January the Caldwell Memorial Award of the Texas Society of Pathologists in recognition of his contributions in pathology. The scroll and gold medal were given to Mrs. Brindley when the pathologists met January 29-30 in Dallas, the presentation being made by Dr. Janet Caldwell, wife of the late Dr. George T. Caldwell for whom the award was named.

Dr. Brindley is survived by his wife, the former Miss Anne Ammons; two brothers, Dr. G. V. Brindley, Temple, and Hanby Brindley, Waxahachie; and two sisters, Mrs. G. B. Underwood, Loving, and Mrs. Henry Bales, Topeka, Kan.

D. B. DAVIS

Dr. David Benjamin Davis died in a Dallas, Texas, hospital on October 24, 1954, after a long illness.

Born in Leesburg on May 15, 1878, he attended public schools in New Orleans and had a private tutor after high school. He was graduated from the old Louisville Medical College, Ky., in 1898. After interning at Shreveport Charity Hospital in Louisiana, Dr. Davis practiced in Shreveport and Bunkie, La., where he was city health officer for eight years, until 1917, when he was a captain in the Army Medical Corps. In 1919 he did postgraduate work at the Eye, Ear, Nose, and Throat Hospital, New Orleans, and in 1920

DR. DAVID B. DAVIS

at Knapp Memorial Eye Hospital, New York. In 1920 he moved to Dallas and specialized in eye, ear, nose, and throat.

A member of the Texas Medical Association through Dallas County Medical Society continuously from 1922 until this year, Dr. Davis was also a member of the American Medical Association until 1951. He was a member of the Jewish synagogue.

Surviving are his wife; two sons, Dr. Bert E. Davis, Denton, and Dr. Leo G. Davis, Dallas; a daughter, Mrs. Buford Feldman, Nashville, Tenn.; and seven grandchildren.

L. C. POWELL

Dr. Leslie Charles Powell, Sr., Beaumont, Texas, died there on December 21, 1954, of coronary occlusion.

The son of Dr. Charles Newton Powell and Annie Elizabeth (Trotti) Powell, he was born on October 4, 1894, in Laurel. He attended Allen Academy, Bryan, and Southwestern University, Georgetown, and was graduated in 1919 from the University of Texas School of Medicine, Galveston. He interned at John Sealy Hospital, Galveston, and was a house physician at Hotel Dieu, Beaumont. He practiced in Beaumont from 1920 until the time of his death, being on the active staffs of all the Beaumont hospitals.

A member of the American and Texas Medical Associations through Jefferson County Medical Society continuously since 1920, Dr. Powell was also a member of the Tenth District Medical Society. He served as councilor of the Tenth District from 1948 to 1951, vice-president of the Texas Medical Association in 1951, and delegate to the state organization for many years, and had held every elective office in the Jefferson County Medical Society. Dr. Powell was a member of the Texas Association of Obstetrics and Gynecology, the Texas and American Academies of General Practice, and the Association of American Physicians and Surgeons. He was a thirty-second degree Mason,

DR. L. C. POWELL

being a Shriner; was a member of the American Legion, the Beaumont Chamber of Commerce, and the Rotary Club; was president of the Beaumont School Board; and was a charter member of Theta Kappa Psi medical fraternity. He was a member of the Presbyterian Church. Dr. Powell was in the Student Military Training Corps during World War I, stationed in Galveston.

Married March 15, 1924, in Beaumont to Mrs. Tillie Bee W. Gossard, he is survived by his wife; a son, Dr. Leslie Charles Powell, Jr., Austin; two daughters, Mrs. Muriel Gene Ingram, Houston; and Miss Judith Ann Powell, Beaumont; his mother, Beaumont; and two sisters, Mrs. Hazel Vera Darnell and Mrs. Kathleen Kinnear, Beaumont.

R. W. COWART

Dr. Robert Walter Cowart, Dallas, Texas, died at his home there on December 12, 1954, of a heart attack after a lengthy illness.

Born in San Saba County on March 14, 1889, Dr. Cowart was the son of Mr. and Mrs. D. T. Cowart. He attended North Texas State College, Denton, and was graduated in 1916 from the Baylor University College of Medicine, then in Dallas. Dr. Cowart practiced in Dallas for thirty years prior to his retirement because of ill health.

A member of the American and Texas Medical Associations through Dallas County Medical Society almost continuously since 1920, Dr. Cowart was elected an honorary

member of the state organization in 1950. He was also a member of the Southern Medical Association. Dr. Cowart was a member of the American Legion and the YMCA, and was a Scottish Rite Mason, being a member of the lodges at Robert Lee and Dallas. During World War I he served as a captain in the Army Medical Corps and for

DR. ROBERT W. COWART

several years during World War II he served the Selective Service System. He was a member of the Church of Christ.

Dr. Cowart and the former Miss Jim Reed were married in Dallas on May 3, 1924. She survives, as do a brother, Charlie Cowart, and two sisters, Mrs. Bessie Locker and Mrs. Jewel Christmas, all of Mercury.

C. H. STANDIFER

Dr. Charles Herbert Standifer died at his home in Austin, Texas, on November 30, 1954, of coronary occlusion and arteriosclerosis.

The son of Richard Vaughn Standifer and Sarah Texas (Gatlin) Standifer, Dr. Standifer was born on October 15, 1882, in Elgin and attended public schools there and at Lometa and Georgetown. He was graduated from Southwestern University, Georgetown, and in 1909 from the University of Louisville School of Medicine, being valedictorian of his class. He also received a degree in pharmacy from the Louisville school and later studied neuropsychiatry at Columbia University in New York. Dr. Standifer was acting assistant surgeon of the United States Public Health Service Hospital at Louisville from 1909 until 1912, when he began practicing medicine in Dallas. He was on the staff of the Terrell State Hospital from 1916 until 1918, when he joined the Army Medical Corps. After his return from overseas service, in which he attained the rank of captain, Dr. Standifer worked with the Veterans Bureau in Dallas and San Antonio. He became superintendent of the Dallas City and County Hospital System in 1926 and superintendent of the Texas State Hospital at Austin in 1927. He then was on the Army Induction Board at San Antonio from February, 1943, until it was disbanded, when he returned to Austin. For the next few years he worked with the Austin State Hospital, Austin State School, and Veterans Administration Hospital at Lisbon. From 1945 until 1952, when he retired and moved to Austin, Dr. Standifer was on the staff of the Terrell State Hospital.

A member of the Texas and American Medical Associations, first through Dallas and then Travis County Medical Society, almost continuously since 1915, Dr. Standifer was elected an inactive member of the Texas organization in 1953. He was also a member of the Southern Medical Association. Dr. Standifer was a charter member and first president of the Texas Neuropsychiatric Association; was a charter member of the Texas Society for Mental Hygiene; was certified by the American Board of Psychiatry and Neurology; and was a member of the American Psychiatric Association, the Texas Neuropsychiatric Association, and the Southern Psychiatric Association. He was a Mason, being a Shriner and Jester; was a member of the American Legion; and was a member of the Methodist Church.

Dr. Standifer and the former Miss Margaret Alleen Yeary were married April 21, 1916, at Farmersville. In addition to his wife, Dr. Standifer is survived by a son, Charles Her-

DR. C. H. STANDIFER

bert Standifer, Jr., Dallas; a daughter, Mrs. Margaret Alleen Fox, Corpus Christi; two sisters, Mrs. Olive Hines and Mrs. Vaughn Breeding, Oklahoma City; a brother, Richard H. Standifer, Dallas; and three grandsons.

O. Y. JANES

Dr. Olen Yandell Janes, Cooper, Texas, died October 7, 1954, at his home of apoplexy, after an illness of several years.

Dr. Janes, the son of Dr. Francisco Plato Janes and Orpha Ann (Reed) Janes, was born in Ramer, Tenn., on December 12, 1881. He attended the public schools of Delta County and Henry College at Campbell, Texas. He entered the University of Texas School of Medicine, Galveston, in 1902 and received his state certificate in 1905. In 1907 he became a licensed pharmacist as well as a physician. He engaged in the general practice of medicine and surgery, establishing the first hospital in Delta County at Prattville in 1920. In 1923 he founded a hospital at Cooper and practiced there until his retirement in 1947. His three sons now operate the Janes Clinic and Hospital, Cooper.

A member of the Texas and American Medical Associations through Delta County Medical Society for many years, Dr. Janes was elected an honorary member of the state organization in 1951. He was president of his county med-

ical society that year. He had served as editor-in-chief of the medical journal published by the University of Texas Medical Branch when he was a student there.

On October 25, 1909, Dr. Janes married the former Miss Evelyn Robinson of Lamar County. He is survived by his wife, three sons, Dr. Osler Y. Janes, Dr. Olen G. Janes, and Dr. Oscar G. Janes, all of Cooper; one daughter, Mrs. Charles W. Bailey, Ridgefield, Conn.; one sister, Mrs. J. A. Jeter, Cooper; and nine grandchildren.

L. R. RICE

Dr. Lee Roy Rice died at his home in Diboll, Texas, on December 28, 1954, of a coronary attack.

Dr. Rice was the son of Dr. C. F. and Mazie (Chambers) Rice and was born on June 15, 1905, in Sanger, Texas. He attended Texas Agricultural and Mechanical College, College Station, prior to Baylor University College of Medicine, then in Dallas, from which he was graduated in 1930. Dr. Rice interned at Touro Infirmary, New Orleans, in 1930 and was house physician at St. Margaret's Hospital, Montgomery, Ala., from 1931 until 1932. He took a residency in urology and radiology at Touro Infirmary. He practiced in Gainesville from 1933 until 1942, when he joined the Medical Corps of the Air Force as a captain. In 1946, after

DR. LEE ROY RICE

his separation from the service, Dr. Rice settled in Marshall. In 1953, he moved to Diboll. While in Marshall, he was a urologist for the Texas and Pacific Hospital. He had been a staff member at the Gainesville Sanitorium, the Kahn Memorial Hospital at Marshall, and the Memorial Hospital at Lufkin.

A member of the Texas and American Medical Associations continuously since 1933 excepting the time spent in service, Dr. Rice was first a member through Cooke County Medical Society, then through Harrison County, and later, Angelina County. He served as secretary of the Cooke County organization in 1934 and 1935 and as president in 1938; he was secretary of Harrison County Medical Society in 1947. He was city health officer in Gainesville. A member of Phi Chi medical fraternity, Dr. Rice was a Mason; a member of Kiwanis and Lions Club; former president of the Young Men's League, Gainesville; health director of the Boy Scouts of America, East Texas area; and a member of the Methodist Church. A biography of Dr. Rice's life appears in the New Encyclopedia of Texas, which is published by the Texas Historical Society.

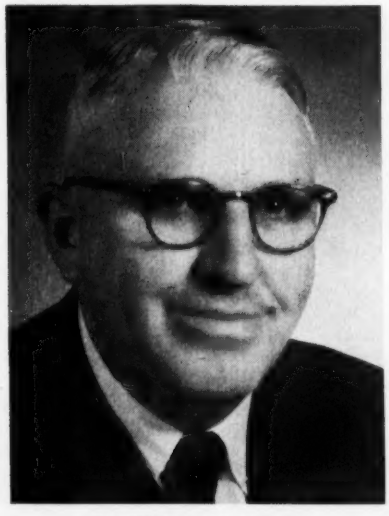
The former Miss Marie N. Sievers and Dr. Rice were married on January 16, 1932, in Montgomery, Ala. Surviving are his wife; two daughters, Mrs. Ernest McKay Gillen, Jr., Shreveport, La., and Miss Elizabeth Marie Rice, Diboll; a son, Lee Roy Rice, Jr., Diboll; and his stepmother, Mrs. Elizabeth Rice Thomas, Coffeyville, Kan.

W. R. SNOW

Dr. William Riley Snow died at his home in Abilene, Texas, on December 20, 1954, of a heart attack.

Dr. Snow was born December 14, 1893, in Brown County and attended public school there. He was graduated in 1917 from Texas Christian University, Fort Worth, and in 1924 from the University of Texas School of Medicine, Galveston. He interned at St. Mary's Infirmary, Galveston, and Kansas City General Hospital prior to beginning his practice in 1925 in Abilene, where he was a member of and for two years chairman of the staff of Hendrick Memorial Hospital.

Dr. Snow had been a member of the Texas and American Medical Associations continuously since 1926 through the Taylor-Jones Counties Medical Society, which he had served as president and secretary. He was a member of the Masonic Order, being a member of both the Shrine and Knights Templar; was past patron of the Queen Esther chapter of the Order of the Eastern Star; and was a member of the First Baptist Church, Abilene. During World War I,



DR. WILLIAM R. SNOW

Dr. Snow attended the First Officers' Training Camp at Leon Springs and later saw service in France as an infantry captain.

Dr. Snow's first wife, the former Miss Mae Cagle, died in 1945, and on September 1, 1946, he and Mrs. Quincy Belle Ryan of Midland were married in Amarillo. In addition to his wife, he is survived by a son, Dr. Joseph C. Snow, Abilene; two daughters, Mrs. John J. Crutchfield, Abilene, and Mrs. Robert H. Fain, Houston; a niece, Dr. Virginia Boyd, Abilene; and three nephews, Dr. Robert C. L. Robertson and Dr. W. Frank Cole, both of Houston, and Dr. Dale Snow, Fort Worth.